Measure #65 (NQF 0069): Appropriate Treatment for Children with Upper Respiratory Infection (URI)–National Quality Strategy Domain: Efficiency and Cost Reduction

#### 2017 OPTIONS FOR INDIVIDUAL MEASURES:

REGISTRY ONLY

#### **MEASURE TYPE:**

**Process** 

### **DESCRIPTION:**

Percentage of children 3 months - 18 years of age who were diagnosed with upper respiratory infection (URI) and were not dispensed an antibiotic prescription on or three days after the episode

#### **INSTRUCTIONS:**

This measure is to be reported once for <u>each occurrence</u> of upper respiratory infection during the performance period. Claims data will be analyzed to determine unique occurrences. This measure may be reported by eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

# 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:**

Children age 3 months to 18 years of age who had an outpatient or emergency department (ED) visit with a diagnosis of upper respiratory infection (URI) during the measurement period

**Denominator Instructions:** To determine eligibility, look for any of the listed antibiotic drugs below in the 30 days prior to the visit with the URI diagnosis. As long as there are no prescriptions for the listed antibiotics during this time period, the patient is eligible for denominator inclusion.

#### **Denominator Criteria (Eligible Cases):**

Patients aged 3 months to 18 years on date of encounter

AND

Diagnosis for URI (ICD-10-CM): J00, J06.0, J06.9

AND

Patient encounter during the performance period (CPT or HCPCS): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99281, 99282, 99283, 99284, 99285, G0402 AND NOT

# DENOMINATOR EXCLUSIONS:

Patient prescribed or dispensed antibiotic for documented medical reason(s) (e.g., intestinal infection, pertussis, bacterial infection, Lyme disease, otitis media, acute sinusitis, acute pharyngitis, acute tonsillitis, chronic sinusitis, infection of the pharynx/larynx/tonsils/adenoids, prostatitis, cellulitis, mastoiditis, or bone infections, acute lymphadenitis, impetigo, skin staph infections, pneumonia/gonococcal infections, venereal disease (syphilis, chlamydia, inflammatory diseases [female reproductive organs]), infections of the kidney, cystitis or UTI, and acne: G8709

Children who are taking antibiotics in the 30 days prior to the date of the encounter during which the diagnosis was established: G9701

ΩR

Patients who use hospice services any time during the measurement period: G9700

### NUMERATOR:

Children without a prescription for antibiotic medication on or 3 days after the outpatient or ED visit for an upper respiratory infection

**Numerator Instructions:** For performance, the measure will be calculated as the number of patient's encounter(s) where antibiotics were neither prescribed nor dispensed on or within three days of the episode for URI over the total number of encounters in the denominator (patients aged 3 months to 18 years with an outpatient or ED visit for URI. A higher score indicates appropriate treatment of patients with URI (e.g., the proportion for whom antibiotics were not prescribed or dispensed following the episode).

Table 1 - Antibiotic Medications

Description	Prescription	
Aminopenicillins	Amoxicillin	Ampicillin
Beta-lactamase inhibitors	Amoxicillin-clavulanate	
First generation cephalosporins	Cefadroxi	Cephalexin
Folate antagonist	Cefazolin     Trimethoprim	
Lincomycin derivatives	Clindamycin	
Macrolides	<ul> <li>Azithromycin</li> </ul>	Erythromycin ethylsuccinate
	<ul> <li>Clarithromycin</li> </ul>	Eythromycin lactobionate
	<ul> <li>Erythromycin</li> </ul>	Erythromycin stearate
Miscellaneous antibiotics	Erythromycin-sulfisoxazole	
Natural penicillins	Penicillin G potassium	Penicillin V potassium
	Penicillin G sodium	
Penicillinase-resistant penicillins	<ul> <li>Dicloxacillin</li> </ul>	
Quinolones	Ciprofloxacin	<ul> <li>Moxifloxacin</li> </ul>
	<ul> <li>Levofloxacin</li> </ul>	<ul> <li>Ofloxacin</li> </ul>
Second generation cephalosporins	<ul> <li>Cefaclor</li> </ul>	Cefuroxime
0.15	Cefprozil	
Sulfonamides	Sulfamethoxazole- trimethoprim	
Tetracyclines	Doxycycline	Tetracycline
	Minocycline	
Third generation cephalosporins	Cefdinir	<ul> <li>Ceftibuten</li> </ul>
	• Cefixime	<ul> <li>Cefditoren</li> </ul>
	Cefpodoxime	Ceftriaxone

**Numerator Options:** 

Performance Met: Patient not prescribed or dispensed antibiotic (G8708)

OR

Performance Not Met: Patient prescribed or dispensed antibiotic (G8710)

# **RATIONALE:**

Most upper respiratory infections (URI), also known as the common cold, are caused by viruses that require no antibiotic treatment. Too often, antibiotics are prescribed inappropriately, which can lead to antibiotic resistance (when antibiotics can no longer cure bacterial infections). Pediatric ambulatory visits to physicians account for nearly 50 million antibiotic prescriptions annually in the U.S. The total economic impact of treating URIs is close to \$17 billion per year in direct costs.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

American Family Physician (Wong, Blumberg, and Lowe 2006)

- A diagnosis of acute bacterial rhinosinusitis should be considered in patients with symptoms of a viral upper respiratory infection that have not improved after 10 days or that worsen after five to seven days. (C)
- Treatment of sinus infection with antibiotics in the first week of symptoms is not recommended. (C)
- Telling patients not to fill an antibiotic prescription unless symptoms worsen or fail to improve after several days can reduce the inappropriate use of antibiotics. (B)

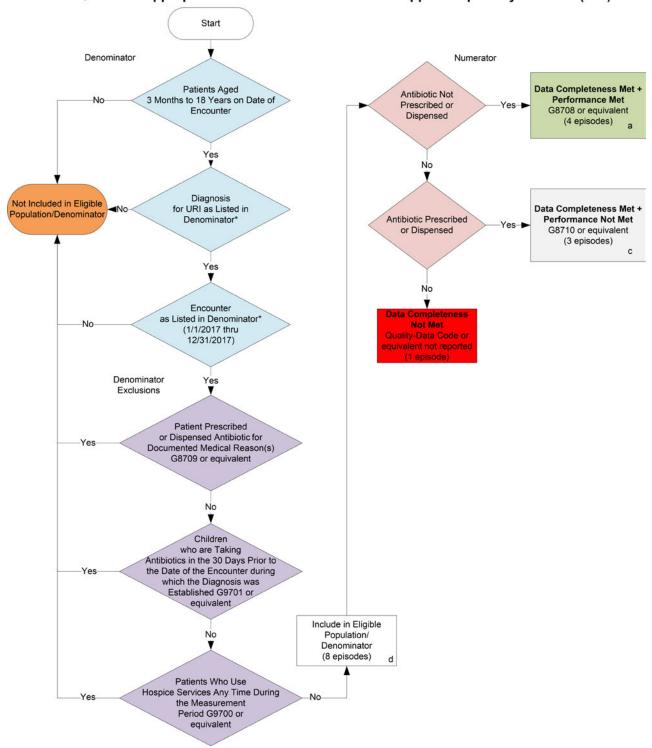
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# 2017 Registry Individual Measure Flow #65 NQF #0069: Appropriate Treatment for Children with Upper Respiratory Infection (URI)



<sup>\*</sup> See the posted Measure Specification for specific coding and instructions to report this measure.

NOTE: Reporting Frequency: Episode

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v1

# 2017 Registry Individual Measure Flow #65 NQF #0069: Appropriate Treatment for Children with Upper Respiratory Infection (URI)

#### **SAMPLE CALCULATIONS:**

Data Completeness=

Performance Met (a=4 episodes) + Performance Not Met (c=3 episodes) = 7 epis

Eligible Population / Denominator (d=8 episodes) =

<u>7 episodes</u> = **87.50**%

8 episodes

Performance Rate=

Performance Met (a=4 episodes) =

<u>4 episodes</u> = **57.14**%

7 episodes

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v1

Data Completeness Numerator (7 episodes) = 7 episodes

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# 2017 Registry Individual Measure Flow

## #65 NQF #0069: Appropriate Treatment for Children with Upper Respiratory Infection (URI)

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 Patients Aged 3 Months to 18 Years on Date of Encounter equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing.
  - b. If the Patients Aged 3 Months to 18 Years on Date of Encounter equals Yes during the measurement period, proceed to Check Patient Diagnosis.
- 3. Check Patient Diagnosis:
  - a. If Diagnosis for URI as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
  - b. If Diagnosis for URI 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 Patient Prescribed or Dispensed Antibiotic for Documented Medical Reason (s).
- Check Patient Prescribed or Dispensed Antibiotic for Documented Medical Reason (s):
  - a. If Patient Prescribed or Dispensed Antibiotic for Documented Medical Reason(s) equals No, proceed to Check Children who are Taking Antibiotics in the 30 Days Prior to the Date of the Encounter during which the Diagnosis was Established.
  - b. If Patient Prescribed or Dispensed Antibiotic for Documented Medical Reason(s) equals Yes, do not include in Eligible Patient Population. Stop Processing.
- 6. Check Children who are Taking Antibiotics in the 30 Days Prior to the Date of the Encounter during which the Diagnosis was Established:
  - a. If Children who are Taking Antibiotics in the 30 Days Prior to the Date of the Encounter during which the Diagnosis was Established equals No, proceed to Check Patients Who Use Hospice Services Any Time During the Measurement Period.
  - b. If Patient Prescribed or Dispensed Antibiotic for Documented Medical Reason(s) equals Yes, do not include in Eligible Patient Population. Stop Processing.
- 7. Check Patients Who Use Hospice Services Any Time During the Measurement Period:
  - a. If Patients Who Use Hospice Services Any Time During the Measurement Period equals No, include in the Eligible population.
  - b. If Patients Who Use Hospice Services Any Time During the Measurement Period equals Yes, do not include in Eligible Patient Population. Stop Processing.

#### 8. 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.

#### Start Numerator

- 10. Check Antibiotic Not Prescribed or Dispensed:
  - a. If Antibiotic Not Prescribed or Dispensed equals Yes, include in Data Completeness Met and Performance Met.
  - Data Completeness Met and Performance Met letter is represented as 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 Antibiotic Not Prescribed or Dispensed equals No, proceed to Antibiotic Prescribed or Dispensed
- 11. Check Antibiotic Prescribed or Dispensed:
  - If Antibiotic Prescribed or Dispensed equals Yes, include in the Data Completeness Met and Performance Not Met.
  - b. Data Completeness Met and Performance Not Met letter is represented as Data Completeness in the Sample Calculation listed at the end of this document. Letter c equals 3 episodes in the Sample Calculation.
  - c. If Antibiotic Prescribed or Dispensed equals No, proceed to Data Completeness Not Met.
- 12. Check Data Completeness Not Met:
  - a. If Data Completeness Not Met, the Quality Data Code or equivalent was not reported. 1 episode has been subtracted from the Data Completeness numerator in sample calculation.

SAMPLE CALCULATIONS:		
Data Completeness= Performance Met (a=4 episodes) + Performance Not Met (c=3 episodes) = Eligible Population / Denominator (d=8 episodes) =	<u>7 episodes</u> = <b>87.50</b> % 8 episodes	
Performance Rate= Performance Met (a=4 episodes) = Data Completeness Numerator (7 episodes) =	<u>4 episodes</u> = <b>57.14</b> % 7 episodes	