

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

**2018 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 submitted once for **each occurrence** of upper respiratory infection during the performance period. Claims data will be analyzed to determine unique occurrences. This measure may be submitted by eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

Measure Submission:

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

OR

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

OR

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	<ul style="list-style-type: none"> • Amoxicillin • Ampicillin
Beta-lactamase inhibitors	<ul style="list-style-type: none"> • Amoxicillin-clavulanate
First generation cephalosporins	<ul style="list-style-type: none"> • Cefadroxi • Cephalexin • Cefazolin
Folate antagonist	<ul style="list-style-type: none"> • Trimethoprim
Lincomycin derivatives	<ul style="list-style-type: none"> • Clindamycin
Macrolides	<ul style="list-style-type: none"> • Azithromycin • Erythromycin ethylsuccinate • Clarithromycin • Erythromycin lactobionate • Erythromycin • Erythromycin stearate
Miscellaneous antibiotics	<ul style="list-style-type: none"> • Erythromycin-sulfisoxazole
Natural penicillins	<ul style="list-style-type: none"> • Penicillin G potassium • Penicillin V potassium • Penicillin G sodium
Penicillinase-resistant penicillins	<ul style="list-style-type: none"> • Dicloxacillin
Quinolones	<ul style="list-style-type: none"> • Ciprofloxacin • Moxifloxacin • Levofloxacin • Ofloxacin
Second generation cephalosporins	<ul style="list-style-type: none"> • Cefaclor • Cefuroxime • Cefprozil
Sulfonamides	<ul style="list-style-type: none"> • Sulfamethoxazole-trimethoprim
Tetracyclines	<ul style="list-style-type: none"> • Doxycycline • Tetracycline • Minocycline
Third generation cephalosporins	<ul style="list-style-type: none"> • Cefdinir • Ceftibuten • Cefixime • Cefditoren • 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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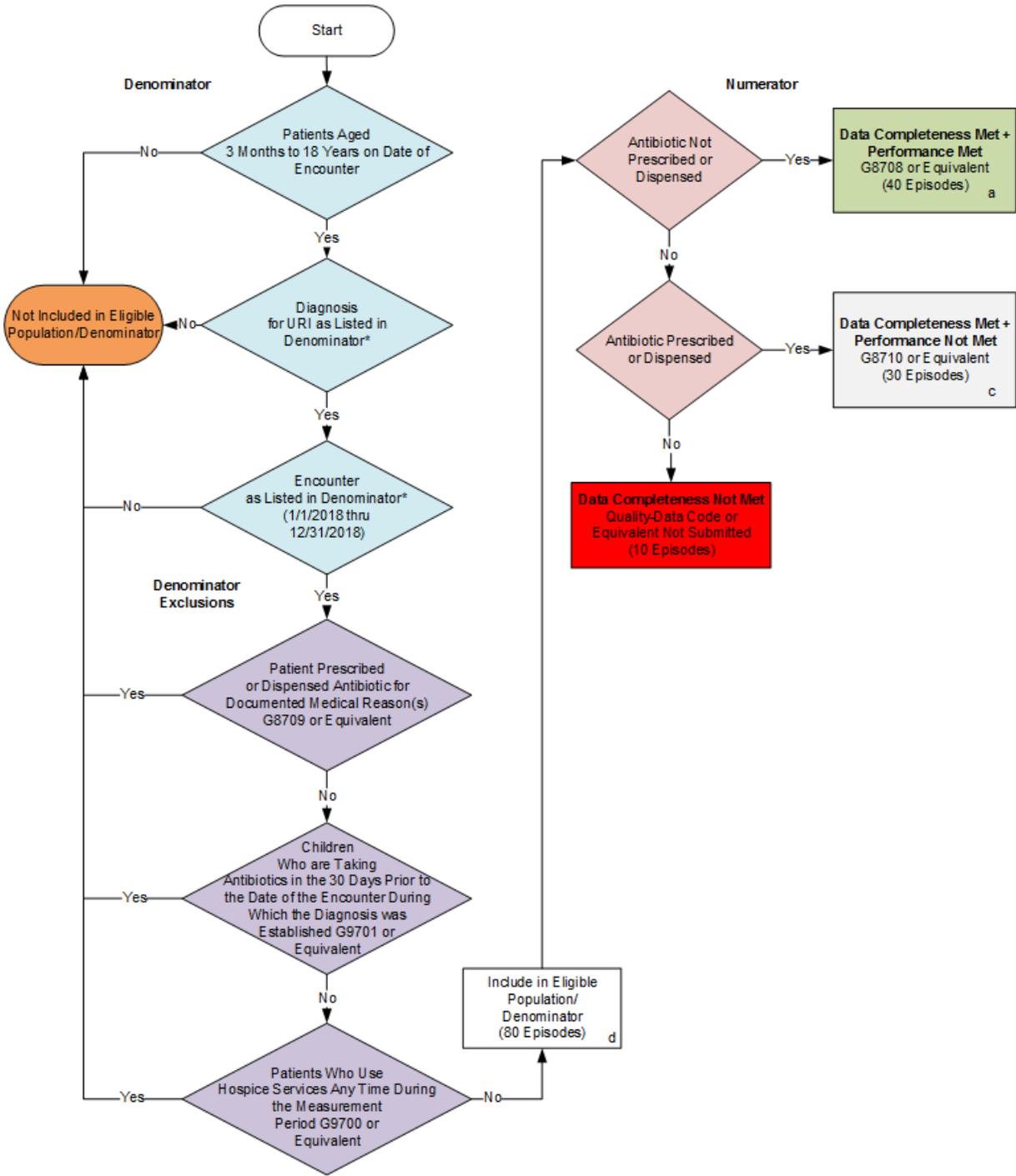
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**2018 Registry Flow for Quality ID #65 NQF #0069:
Appropriate Treatment for Children with Upper Respiratory Infection (URI)**



* See the posted Measure Specification for specific coding and instructions to submit this measure.
NOTE: Submission Frequency: Episode

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v2

**2018 Registry Flow for Quality ID #65 NQF #0069:
Appropriate Treatment for Children with Upper Respiratory Infection (URI)**

SAMPLE CALCULATIONS:

Data Completeness=

$$\frac{\text{Performance Met (a=40 episodes)} + \text{Performance Not Met (c=30 episodes)}}{\text{Eligible Population / Denominator (d=80 episodes)}} = \frac{70 \text{ episodes}}{80 \text{ episodes}} = 87.50\%$$

Performance Rate=

$$\frac{\text{Performance Met (a=40 episodes)}}{\text{Data Completeness Numerator (70 episodes)}} = \frac{40 \text{ episodes}}{70 \text{ episodes}} = 57.14\%$$

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

NOTE : Submission Frequency: Episode

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2018 Registry Flow For Quality ID

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

Please refer to the specific section of the specification to identify the denominator and numerator information for use in submitting this Individual Specification. This flow is for registry data submission.

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).
5. 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 80 episodes in the Sample Calculation.
9. 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.
 - b. 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 40 episodes in the Sample Calculation.
 - c. If Antibiotic Not Prescribed or Dispensed equals No, proceed to Antibiotic Prescribed or Dispensed
11. Check Antibiotic Prescribed or Dispensed:
 - a. 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 30 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 submitted. 10 episodes have been subtracted from the Data Completeness Numerator in the Sample Calculation.

SAMPLE CALCULATIONS:

Data Completeness=

$$\frac{\text{Performance Met (a=40 episodes) + Performance Not Met (c=30 episodes)}}{\text{Eligible Population / Denominator (d=80 episodes)}} = \frac{70 \text{ episodes}}{80 \text{ episodes}} = 87.50\%$$

Performance Rate=

$$\frac{\text{Performance Met (a=40 episodes)}}{\text{Data Completeness Numerator (70 episodes)}} = \frac{40 \text{ episodes}}{70 \text{ episodes}} = 57.14\%$$