Quality ID #66: Appropriate Testing for Children with Pharyngitis – National Quality Strategy Domain: Efficiency and Cost Reduction

## **2018 OPTIONS FOR INDIVIDUAL MEASURES:**

**REGISTRY ONLY** 

#### **MEASURE TYPE:**

**Process** 

#### **DESCRIPTION:**

Percentage of children 3-18 years of age who were diagnosed with pharyngitis, ordered an antibiotic and received a group A streptococcus (strep) test for the episode

#### **INSTRUCTIONS:**

This measure is to be submitted once for **each occurrence** of pharyngitis during the performance period. Claims data will be analyzed to determine unique occurrences. This measure is intended to reflect the quality of services provided for the primary management of patients with pharyngitis who were dispensed an antibiotic. 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 3 - 18 years of age who had an outpatient or emergency department (ED) visit with a diagnosis of pharyngitis during the measurement period and an antibiotic ordered on or three days after the visit

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

**DENOMINATOR NOTE:** \*Signifies that this CPT Category I code is a non-covered service under the Medicare Part B Physician Fee Schedule (PFS). These non-covered services should be counted in the denominator population for registry-based measures.

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

Patients aged 3 to 18 years on date of encounter

#### and

**Diagnosis for pharyngitis (ICD-10-CM):** J02.0, J02.8, J02.9, J03.00, J03.01, J03.80, J03.81, J03.90, J03.91

#### AND

Patient encounter during the performance period (CPT or HCPCS): 96160, 96161, 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241\*, 99242\*, 99243\*, 99244\*, 99245\*, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99401\*, 99402\*, 99403\*, 99404\*, 99411\*, 99412\*, 99429\*, 99455, 99456, 99281, 99282, 99283, 99284, 99285, G0402

# <u>AND</u>

Prescribed or dispensed antibiotic: G8711

# **AND NOT**

# **DENOMINATOR EXCLUSIONS:**

Patients who use hospice services any time during the measurement period:  $\ensuremath{\mathsf{G9702}}$  OR

Children who are taking antibiotics in the 30 days prior to the diagnosis of pharyngitis: G9703

**Table 1 - Antibiotic Medications** 

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

# **NUMERATOR:**

Children with a group A streptococcus test in the 7-day period from 3 days prior through 3 days after the diagnosis of pharyngitis

**Numerator Instructions:** For performance, the measure will be calculated as the number of patient encounters where diagnosed with pharyngitis, dispensed an antibiotic and received a group A streptococcus

(strep) test for the episode over the total number of encounters in the denominator (patients aged 3 to 18 years with an outpatient or ED visit and an antibiotic ordered on or three days after the visit). A higher score indicates appropriate treatment of children with pharyngitis (e.g., the proportion for whom antibiotics were prescribed with an accompanying step test).

Numerator Options:

Performance Met: Group A Strep Test Performed (3210F)

<u>OR</u>

Performance Not Met: Group A Strep Test not Performed, reason not

otherwise specified (3210F with 8P)

#### RATIONALE:

Group A streptococcal bacterial infections and other infections that cause pharyngitis (which are most often viral) often produce the same signs and symptoms (IDSA 2002). The American Academy of Pediatrics, the Centers for Disease Control and Prevention, and the Infectious Diseases Society of America all recommend a diagnostic test for Strep A to improve diagnostic accuracy and avoid unnecessary antibiotic treatment (Linder et al. 2005).

Estimated economic costs of pediatric streptococcal pharyngitis in the United States range from \$224 million to \$539 million per year, including indirect costs related to parental work losses. At a higher level, the economic cost of antibiotic resistance vary but have extended as high as \$20 billion in excess direct healthcare costs, with additional costs to society for lost productivity as high as \$35 billion a year (2008 dollars) (Roberts et al. 2009).

# **CLINICAL RECOMMENDATION STATEMENTS:**

Infectious Disease Society of America (2012)

The Infectious Diseases Society of America (IDSA) "recommends swabbing the throat and testing for GAS pharyngitis by rapid antigen detection test (RADT) and/or culture because the clinical features alone do not reliably discriminate between GAS and viral pharyngitis except when overt viral features like rhinorrhea, cough, oral ulcers, and/or hoarseness are present"

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# 2018 Registry Flow for Quality ID #66: Appropriate Testing for Children with Pharyngitis Start Numerator Denominator Patients Aged 3 Years to 18 Years on Date of Data Completeness Met + Group A Strep to coccus Test Performed Performance Met 3210F or Equivalent (50 Episodes) Diagnosis for Pharyngitis as Listed in Denominator\* Group A Data Completeness Met Streptococcus Test Not Per formed, Reason Performance Not Met 3210F-8P or Equivalent (20 Episodes) Not Otherwise Specified Not Included in Eligible Encounter as Listed in Denominator (1/1/2018 thru 12/31/2018) Data Completeness Not Met Quality-Data Code or Equivalent Not Submitted (10 Episodes) Antibiotic Prescribed or Dispensed G8711 or Equivalent Denominator Exclusions Patients Who Use Hospice Services Any Time During the Measurement Period G9702 or Children Who Are Indude in Eligible Taking Antibiotics in the 30 Days Prior to the Diagnosis of Pharyngits G9703 or Equivalent Population/ Denominator (80 Episodes)

<u>\$</u> + Performance Not Met (c=20 episode pulation / Denominator (d=80 episode		-
 Met (a=50 episodes) ness Numerator (70 episodes)	= <u>50 episodes</u> = <b>71.43%</b> = 70 episodes	

<sup>\*</sup> 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 #66: Appropriate Testing for Children with Pharyngitis

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.

- Start with Denominator
- 2. Check Patient Age:
  - a. If Patients Aged 3 to 18 Years on Date of Encounter equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing.
  - b. If Patients Aged 3 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 of Pharyngitis as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
  - b. If Diagnosis of Pharyngitis 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, include in the Eligible Population.
- 5. Check Antibiotic Prescribed or Dispensed:
  - a. If Antibiotic Prescribed or Dispensed equals No, do not include in Eligible Patient Population. Stop Processing.
  - b. If Antibiotic Prescribed or Dispensed equals Yes, proceed to Check Patients Who Use Hospice Services Any Time During the Measurement Period.
- 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, proceed to check Children Who Are Taking Antibiotics in the 30 Days Prior to the Diagnosis of Pharyngitis.
  - b. If Patients Who Use Hospice Services Any Time During the Measurement Period equals Yes, do not include in Eligible Patient Population. Stop Processing.
- 7. Check Children Who Are Taking Antibiotics in the 30 Days Prior to the Diagnosis of Pharyngitis:
  - a. If Children Who Are Taking Antibiotics in the 30 Days Prior to the Diagnosis of Pharyngitis 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 Group A Streptococus Test Performed:

- If Group A Streptococus Test Performed 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 50 episodes in the Sample Calculation.
- c. If Group A Streptococus Test Performed equals No, proceed to Group A Streptococcus Test Not Performed, Reason Not Specified.
- 11. Check Group A Streptococcus Test Not Performed, Reason Not Otherwise Specified:
  - a. If Group A Streptococcus Test Not Performed, Reason Not Otherwise Specified equals Yes, include in 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 20 episodes in the Sample Calculation.
  - If Group A Streptococcus Test Not Performed, Reason Not Otherwise Specified 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= Performance Met (a=50 episodes) + Performance Not Met (c=20 episodes) = 70 episodes = 87.50% Eligible Population / Denominator (d=80 episodes) = 80 episodes Performance Rate= Performance Met (a=50 episodes) = 50 episodes = 71.43% Data Completeness Numerator (70 episodes) = 70 episodes