Quality Measure Translation to Practice

February 2024

- Appropriate Treatment for Upper Respiratory Infection
- Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis
- Appropriate Testing for Pharyngitis

Upper Respiratory Tract Infections

Causes/Manifestations

- Viral or bacterial
- Acute bronchitis, bronchiolitis, common cold, influenza and respiratory distress syndromes

Epidemiology

- One of top three diagnoses in the outpatient setting
- URI accounts for estimated 10 million outpatient appointments a year.
- Adults obtain a common cold around 2-3 times a year
- Pediatrics can have upwards of 8 cases yearly
- Relief of symptoms is the main reason for outpatient visits among adults
- Majority of these appointments lead to unnecessary antibiotic prescription.
- URI can account for >20 million missed days of school and >20 million days of work lost

www.ncbi.nlm.nih.gov/books/NBK532961/

Facts

Antibiotic resistance is among the greatest public health threats today, leading to an estimated 2 million infections and 23,000 deaths per year in the United States. (CDC)

Antibiotic Resistance (leading causes/WHO)

- Misuse and overuse of antimicrobials in humans, animals and plants

Antimicrobial Stewardship

- Critical to effectively treat infections, protect patients from harms caused by unnecessary antibiotic use and combat antibiotic resistance.

www.cdc.gov/antibiotic-use/stewardship-report/index.html

www.who.int/news-room/fact-sheets/detail/antimicrobial-resistance

New Updated Guidance in 2023

Issued by CDC Office of Antibiotic Stewardship:

- Leveraging Health Systems to Expand and Enhance Antibiotic Stewardship in Outpatient Settings
- Antibiotic Stewardship in Outpatient Telemedicine
- Core Elements of Outpatient Antibiotic Stewardship
  - Commitment
  - Action for policy and practice
  - Tracking and reporting
  - Education and expertise

Antibiotic Use Stats 2022

National Rates

- **236.4 million** antibiotic prescriptions in an outpatient setting
  - equivalent to **709 antibiotic prescriptions per 1000 persons**.

State of Kansas Rates

- **803 antibiotic prescriptions per 1,000 persons**.
- Kansas ranks #11 (higher ranking is worse) for total antibiotics prescribed compared to other states

www.cdc.gov/antibiotic-use/data/report-2022.html

Oral Antibiotic Prescribing by Specialty – United States, 2022

PROVIDER SPECIALTY	NUMBER OF ANTIBIOTIC PRESCRIPTIONS (MILLIONS)	ANTIBIOTIC PRESCRIPTIONS PER PROVIDER, RATE
Physician Assistants and Nurse Practitioners	84.4	165
Primary Care Physicians	70.0	179
Dentistry	25.2	127
Surgical Specialties	16.4	115
Emergency Medicine	12.0	182
Dermatology	5.4	299
Obstetrics/Gynecology	4.5	81
Other	18.5	27
All Healthcare Professionals	236.4	114

www.cdc.gov/antibiotic-use/data/report-2022.html

Health Disparities in Antibiotic Misuse

CDC found certain characteristics of populations that indicated an increased antibiotic use in the U.S.

- Extremities of age (< 5 years or elderly) populations
- Elderly with comorbidity diagnoses
- White/Non-Hispanic with private insurance
- Type of practitioner (FP/IM)
- Rural communities

*CDC provided webinar on Addressing Health Inequities

HEDIS Measures

- URI - Appropriate Treatment for Upper Respiratory Infection
- AAB - Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis
- CWP - Appropriate Testing for Pharyngitis

Appropriate Treatment for Upper Respiratory Infection (URI) Tech Specs

Percentage of episodes for patients 3 months of age and older with a diagnosis of upper respiratory infection (URI) that did not result in an antibiotic dispensing event. (No antibiotics on date of service and for 3 days following)

- A higher rate indicates appropriate treatment for URI.

Captures all eligible episodes of treatment from July 1 of the year prior to the measurement year to June 30 of the measurement year.

Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB) Tech Specs

Percentage of episodes for patients three months of age and older with a diagnosis of one or more of acute bronchitis/bronchiolitis which did not result in an antibiotic dispensing event. (No antibiotics on date of service and for 3 days following)

- A higher rate indicates appropriate treatment (i.e., the proportion of episodes that did not result in an antibiotic prescribing event).

Captures all eligible episodes of treatment from July 1 of the year prior to the measurement year to June 30 of the measurement year.

Appropriate Testing for Pharyngitis (CWP) Tech Specs

Assesses the percentage of episodes for patients ages 3 years and older where the patient was diagnosed with pharyngitis, dispensed an antibiotic, and received a group A Streptococcus (strep) test for the episode.

- A higher rate indicates completion of the appropriate testing required to merit antibiotic treatment for pharyngitis.

Captures all eligible episodes of treatment from July 1 of the year prior to the measurement year to June 30 of the measurement year.

Special Documentation – CWP

- Compliance for this measure relies on **testing for group A Streptococcus** for the episode
- Clinical guidelines recommend a strep test when the only diagnosis is pharyngitis
- Strep tests can be either a rapid strep test or a lab test
- Strep testing must be done in conjunction with dispensing of antibiotics for pharyngitis

Common Patient Misperceptions

- My child needs an antibiotic to go back to school.
- I need an antibiotic to go back to work.
- The antibiotic will cure my cold, sore throat and runny nose.

Suggested provider responses:

- Use positive statements focused on specific guidance regarding viral symptom management (e.g. "A spoonful of honey can help the cough").
- Offer a contingency plan (e.g. close follow up and reassessment for antibiotics if condition does not improve).
- Consider referring to a viral condition as a "chest cold" or a “common cold.” These terms may be more palatable for patients when deferring antibiotics.

www.aafp.org/pubs/fpm/issues/2021/1100/p15.html

Prescribing an Antibiotic?

(You need to document why in your note and include necessary codes on the claim.)

- Use the diagnosis code for the bacterial infection in addition to the applicable code(s) for URI, bronchitis or pharyngitis.
- When treating with an antibiotic for an upper respiratory infection, bronchitis or pharyngitis due to a comorbidity or underlying chronic illness, document that diagnosis code on the claim.

Comorbidity/Bacterial Disease Documentation

Refer to the National Institutes of Health (NIH) National Library of Medicine Value Set Authority Center at https://vsac.nlm.nih.gov/welcome for a complete list.

Common comorbidities include:

- COPD, HIV, Cancers, Emphysema
- Common diagnoses associated with bacterial infections include:
  - Acute sinusitis J01.80, J01.90
  - Acute tonsillitis J03.81, J03.90, J03.91
  - Bacterial pneumonia J13, J14, J15.211, J15.212, J15.3, J15.4, J15.7, J15.9, J16.0, J16.8, J18.0, J18.1, J18.8, J18.9
  - Chronic sinusitis J32
  - Otitis media H66, H67
  - Streptococcal Pharyngitis J02.0
  - Streptococcal tonsillitis J03.00, J03.01, J03.80

How You Can Help Win the Antibiotic Battle

- Do not prescribe antibiotics for routine treatment of uncomplicated acute bronchitis, sore throat or URI, unless clinically indicated.
- When appropriate, use language that deflects relationship to antibiotics, e.g. ‘chest cold,’ ‘common cold,’ or ‘viral upper respiratory infection,’ when talking to in patients.
- Offer the patient symptomatic relief, as needed, such as cough suppressants, nonsteroidal anti-inflammatory drugs (NSAIDS), multi-symptom over-the-counter (OTC) medications, and possibly bronchodilators (if there is any bronchospasm).

How You Can Help Win the Antibiotic Battle

Talk about antibiotic (antimicrobial) resistance.

- Antibiotic resistance is one of the most urgent threats to the public's health.
- Explain what antibiotic (antimicrobial) resistance is in common language
- Emphasize that it is important to use the right antibiotic for the right condition and take them as prescribed
- Educate patients and their families to recognize the signs and symptoms of worsening infection and sepsis, and to know when to seek medical care.

Use the CDC's Symptom Relief Prescription Pad (PDF is available for download at https://bit.ly/3L5doAh)

Symptom Relief for Viral Illnesses

BE ANTIBIOTICS AWARE
SMART USE, BEST CARE

1. DIAGNOSIS

- ○ Cold or cough
- ○ Middle ear fluid (Otitis Media with Effusion, OME)
- ○ Flu
- ○ Viral sore throat
- ○ Bronchitis
- ○ Other:

You have been diagnosed with an illness caused by a virus. Antibiotics do not work on viruses. When antibiotics aren't needed, they won't help you, and the side effects could still hurt you. The treatments prescribed below will help you feel better while your body fights off the virus.

2. GENERAL INSTRUCTIONS

- ○ Drink extra water and fluids.
- ○ Use a cool mist vaporizer or saline nasal spray to relieve congestion.
- ○ For sore throats in older children and adults, use ice chips, sore throat spray, or lozenges.
- ○ Use honey to relieve cough. Do not give honey to an infant younger than 1.

3. SPECIFIC MEDICINES

- ○ Fever or aches:
- ○ Ear pain:
- ○ Sore throat and congestion:

Use medicines according to the package instructions or as directed by your healthcare professional. Stop the medication when the symptoms get better.

4. FOLLOW UP

- ○ If not improved in ____ days/hours, if new symptoms occur, or if you have other concerns, please call or return to the office for a recheck.
- ○ Phone:
- ○ Other:

Signed: _____

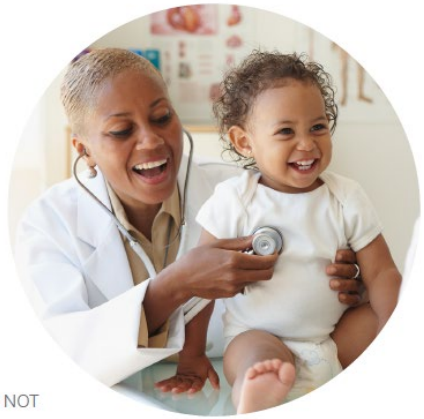
To learn more about antibiotic prescribing and use, visit **www.cdc.gov/antibiotic-use.**

CDC

Sunflower Respiratory Health Provider Education Flyer

sunflower health plan
Medicaid | Marketplace | Medicare

Appropriate Treatment for Upper Respiratory Infection (URI)



Antibiotic resistance can be reduced through proper prescribing practices.

Sneezing, scratchy throat and runny nose are symptoms of the common cold or upper respiratory infection (URI). Typically, URIs are viral and do not benefit from antibiotics.

As a key quality measure, **Sunflower** monitors the percentage of members from 3 months and older who were diagnosed as having a URI and were NOT prescribed an antibiotic.

CODING TIPS

If your diagnosis is URI or nasopharyngitis, antibiotics should generally NOT be prescribed, as these are typically viral infections.

Coding of URI

Diagnosis	ICD-10-CM
Nasopharyngitis	J00
Laryngopharyngitis	J05.0, J06.0
URI	J06.9

These DO NOT Warrant Antibiotics

If there is a secondary diagnosis, such as a bacterial infection of the upper respiratory tract, antibiotics are appropriate and the second diagnosis should be billed on this date of service as well. Examples include: acute or chronic sinusitis, tonsillitis or streptococcal (strep) pharyngitis with confirmed positive strep test.

Diagnoses Indicative of a Bacterial Infection of the Upper Respiratory Tract	ICD-10-CM
Bacterial infection unspecified	A49, A49.8, A49.9
Acute sinusitis	J01.00, J01.01, J01.10, J01.11, J01.2, J01.21, J01.3, J01.31, J01.4, J01.41, J01.8, J01.81, J01.9, J01.91, J00, J01.0, J01.20, J01.30, J01.40, J01.80, J01.90
Acute pharyngitis (confirmed with strep test)	J02.0
Chronic sinusitis	J32, J32.0, J32.1, J32.2, J32.3, J32.4, J32.8, J32.9
Infections of pharynx, larynx, tonsils, adenoids	J35.01, J35.02, J35.03, J02.0, J02.8, J02.9, J03.00, J03.01, J03.80, J03.81, J03.90, J03.91, J35.0, J03, J03.0, J03.9

These MAY Warrant Antibiotics

When patients ask for antibiotics to treat viral infections:

- Explain that unnecessary antibiotics can be harmful.
- Bacterial infection may be treated with antibiotics.
- Build cooperation and trust.
- Encourage active management of the illness.
- Provide antitussives, if appropriate.
- Emphasize the importance of adequate nutrition and hydration.

How You Can Help Win the Antibiotic Battle

If a patient insists on an antibiotic, form a plan with the patient, such as watchful waiting or delayed prescribing. Encourage the patient to call or return to the office if new symptoms occur, or if the condition has not improved in the time you recommend.

- Consider offering a telehealth appointment in follow-up in 3-5 days.

Educate the patient and their family to recognize the signs and symptoms of worsening infection and sepsis, and to know when to seek further medical care.

How You Can Help Win the Antibiotic Battle

Do not prescribe	Do not prescribe antibiotics for viral diagnosis only
Educate	Explain that unnecessary antibiotics can be harmful and most sore throats, coughs, and cold symptoms are caused by viruses • Only bacterial infections use antibiotic treatment • Explain that yellow or green mucus does not always indicate an infection
Use common terms	Refer to the illness as a 'chest cold' or viral illness and suggest at home treatment •Comfort measures (OTC medications, rest, extra fluids, steam)
Plan	Advise patient to call back if symptoms worsen (antibiotics can be prescribed, if necessary, after 3 days of initial diagnosis) •Schedule telehealth appointments for follow up if needed
Submit	Submit any comorbid/competing diagnosis codes that apply
Resubmit	Resubmit an encounter if you missed a second/competing diagnosis code

Resources

Continuing Education and Informational Resources:

- CDC Training on Antibiotic Stewardship – offers multiple modules with free continuing education (CE) credits
- Tune in to Safe Healthcare: A CDC Webinar Series (*CE is available for this resource)
- To Prescribe or Not To Prescribe? Antibiotics and Outpatient Infections (*CE is available for this resource)
- The Primary Care Office Visit: Antibiotics – role play simulation
- Educating Patients About Antibiotic Usage – 7 minute video from New York State Health Department

Patient education materials provided by the CDC