Best Practice Update: Azithromycin in Adults with Upper Respiratory Symptoms

Current Use in Primary Care

-Azithromycin is still frequently prescribed for treatment of sinusitis, bronchitis, otitis, or strep pharyngitis

What is the problem?

- Most sinusitis, otitis, pharyngitis, and bronchitis cases are viral. No antibiotics needed.
- For those needing antibiotics, azithromycin does not provide reliable coverage.

Disease	**Bacterial Incidence (Adults)**	**Common Pathogens**	**Azithromycin Susceptibility (Adults, VUMC)**
Acute sinusitis	2-5% of all acute sinusitis cased caused by bacteria	*Strep pneumoniae* *H. flu*	*Strep pneumonia* is 66% susceptible H. flu not tested (Estimate: 80-90% susceptible)
Acute Otitis Media	<1% caused by bacteria	*Strep pneumoniae* *H. flu*	
Acute Bronchitis (definition excludes presence of COPD)	<10% Bacterial	*Bordetella pertussis, Mycoplasma pneumoniae, Chlamydia pneumoniae*	Not tested BUT antibiotics NOT recommended, even if bacterial cause
Pharyngitis	5-15% Group A Strep (*Strep pyogenes*)		About ½ of *Strep pyogenes* in adult is susceptible

What is the Best Practice?

Avoid prescribing antibiotics for MOST adults presenting with sinusitis, otitis, bronchitis, and pharyngitis with a negative Strep test.

- If patient meets criteria for acute bacterial sinusitis including 1. Nasal obstruction with pus and/or face pain, 2. No improvement in 10 days, or 3. Worsening after initial improvement), prescribe amoxicillin-clavulanate for **7** days (updated duration, previously 10 days)
- IF patients have strep throat (Consider using McIsaac score), prescribe amoxicillin (100% susceptible)
- TRUE penicillin allergies? (Check out this tool for Penicillin allergy risk assessment)
    - For sinusitis + true penicillin allergy, use doxycycline x 7 days.
    - For strep throat + true penicillin allergy, use cephalexin 500mg BID x 10 days.