



# Physicians' Justifications for Prescribing Antibiotics to Patients with Acute Respiratory Infections

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## Background

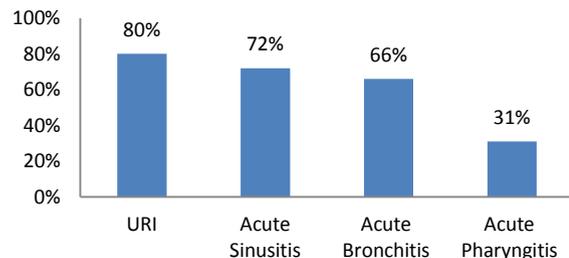
- Antibiotic prescriptions for Acute Respiratory Infections (ARIs) account for the majority of outpatient antibiotic prescriptions
- Antibiotics are not recommended treatments for most ARIs and little is known about why physicians prescribe antibiotics
- We examined the justifications doctors give for antibiotic prescriptions for ARIs and the rate of discordant prescription

## Methods

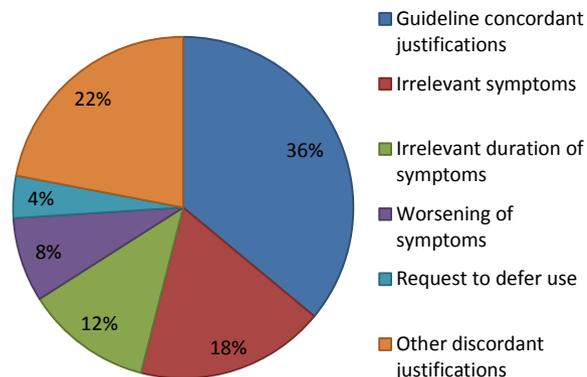
- Sample: 81 Boston area primary care physicians , observed November 2011 to July 2012
- Data collection: Physicians required to type a free-text justification when prescribing antibiotics for patients with ARIs in their practice EHR
- Justifications appeared in each patient's record as "Antibiotic Justification Notes" and were available to other EHR users.
- Two physician reviewers independently coded each justification as guideline-concordant or discordant, resolving disagreements by consensus



Proportion of justifications that were not supported by guidelines



Most common justification categories



## Results

- Overall prescribing rate among ARI office visits was 17% (4% URIs, 26% acute bronchitis, 50% acute sinusitis, and 20% acute pharyngitis) resulting in 1291 antibiotic prescriptions
- Physicians wrote justifications for 95% of prescriptions, and 64% of the justifications were discordant (overall)

Example justifications from common categories

Category	Examples of Justification
Irrelevant symptoms	<ul style="list-style-type: none"> <li>• Color of nasal discharge</li> <li>• Rash</li> </ul>
Insufficient or irrelevant duration of symptoms	<ul style="list-style-type: none"> <li>• One week of cold symptoms</li> <li>• "Prolonged" symptoms</li> </ul>
Irrelevant worsening of symptoms	<ul style="list-style-type: none"> <li>• Worsening fatigue</li> <li>• Chest congestion</li> </ul>
Prescribing with a request to defer use	<ul style="list-style-type: none"> <li>• Use over weekend if not better</li> <li>• For use if fever develops</li> </ul>

## Conclusions

- Most antibiotic prescriptions for ARIs are given justifications that are not supported by guidelines
- Educating physicians about guidelines may reduce antibiotic prescription rates more than efforts to reduce patient demand

## Acknowledgements

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