Reducing Inappropriate Antibiotic Prescribing for Adults with Acute Bronchitis in an Urgent Care Setting: A Quality Improvement Initiative

Tamara L. Link, DNP, FNP-BC, 1 Mary L. Townsend, PharmD, AAHIVP, 2 Eugene Leung, MD, 3 Sekhar Kommu, MD, 4 Rhonda Y. Vega, DVM, and Cristina C. Hendrix, DNS, GNP-BC, FAAN. 1, 5

1 Duke University School of Nursing

307 Trent Drive, Durham, North Carolina 27710

2 Department of Pharmacy, Durham Veterans Affairs Medical

508 Fulton St., Durham VA Medical Center Durham, NC 27705

3 FastMed Urgent Care, 903 S. Beckform Dr, Henderson, North Carolina, 27536

4 FastMed Urgent Care, 935 Shotwell Rd., Ste. 108, Clayton, NC 27520

5 Geriatric Research, Education, and Clinical Center, Durham VA Medical Center Durham NC 27705

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Learning outcomes: After viewing the poster, learners will have a greater understanding of:

- Current clinical practice guidelines regarding non-use of antibiotics for acute bronchitis in healthy adults.

- Factors influencing antibiotic prescribing as per the Agency for Healthcare Research and Quality.

- An evidence-based provider education session and its impact on antibiotic prescribing for acute bronchitis in an urgent care setting.
Abstract

Acute bronchitis is a predominantly viral illness and, according to clinical practice guidelines, should not be treated with antibiotics. Despite clear guidelines, acute bronchitis continues to be the most common acute respiratory illness for which antibiotics are incorrectly prescribed. Overuse of antibiotics contributes to the growing global health crisis of antibiotic resistance, and clinicians must use antibiotics only when evidence-based guidelines support their use. This quality improvement project utilized a single group, pre-post design. The setting for this project was a large urgent care network with numerous separate locations in central North Carolina. The purpose was to determine if nurse practitioners and physician assistants, after participating in a 60-minute, multifaceted interactive provider education session, would reduce inappropriate antibiotic prescribing for healthy adults with acute uncomplicated bronchitis.

Twenty providers attended one of four training sessions offered in October and November 2015. The face-to-face interactive training sessions focused on factors associated with inappropriate prescribing, current clinical practice guidelines (CPGs), and patient communication skills. Retrospective chart review of 217 pre-training and 335 post-training encounters for acute bronchitis by 19 eligible participating providers demonstrated a 61.9% reduction in immediate antibiotic prescribing from 91.7% to 29.8%. Delayed prescribing, which accounted for a small percentage of the total prescriptions given, had a small but significant increase of 9.3% after training. Overall, this interactive provider training, focusing on the multidimensional facets of antibiotic prescribing in an urgent care setting, resulted in significant reductions in inappropriate prescriptions.

References

