**Supplemental Material**

This appendix has been provided by the authors to give readers additional information about their work.

**Supplemental Material Appendix**

1. *International Classification of Diseases, Ninth Revision* (ICD-9) codes
2. Cohort diagnostic definitions

***International Classification of Diseases, Ninth Revision* (ICD-9) codes**

Cystitis: 461.0, 461.1, 461.2, 461.3, 461.8, 461.9

Pharyngitis: 462

Sinusitis: 595, 595.9, 599

**Cohort Diagnostic Definitions**

Definitions were based on the Infectious Disease Society of America (IDSA) guidelines and the Centers for Disease Control and Prevention (CDC) Get Smart Campaign.1-5

Cystitis: acute onset of symptoms (dysuria, urgency, frequency, suprapubic pain and/or hematuria), urinalysis findings (pyuria ≥5 leukocytes/microL, positive leukocyte esterase or positive nitrate), and the absence of flank pain and costovertebral angle tenderness.1

ABU: single clean-catch voided urine specimen with isolation of a single organism in quantitative counts of ≥105 cfu/mL in the absence of symptoms.2

Pharyngitis: acute onset of symptoms, predominantly sore throat. Antimicrobial treatment indicated in patients with a positive rapid antigen detection test (RADT) or at least 3 Centor criteria: lymphadenopathy, tonsillar exudates, fever history (>38°C) and absence of cough.3

Sinusitis: presence of at least 2 major or 1 major PLUS 2 minor symptoms outlined in the IDSA guidelines. Antimicrobial treatment indicated in patients with persistent symptoms that last >10 days and are not improving, severe symptoms (high fever and purulent nasal discharge) for at least 3 days at the beginning of illness or double sickening.4

Non-specific URI: sore throat, nasal symptoms and/or cough with no prominent sign or symptom. Antimicrobial treatment not indicated.5

References

1. Gupta K, Hooton TM, Naber KG, et al. International Clinical Practice Guidelines for the Treatment of Acute Uncomplicated Cystitis and Pyelonephritis in Women: A 2010 Update by the Infectious Diseases Society of America and the European Society for Microbiology and Infectious Diseases. *Clin Infect Dis* 2011;52:e103-e120.
2. Nicolle LE, Bradley S, Colgan R, Rice JC, Schaeffer A, Hooton TM; Infectious Diseases Society of America; American Society of Nephrology; American Geriatric Society. Infectious Diseases Society of America guidelines for the diagnosis and treatment of asymptomatic bacteriuria in adults. *Clin Infect Dis* 2005;40:643-654.
3. Chow AW, Benninger MS, Brook I, Goldstein EJ, et al. IDSA clinical practice guidelines for acute bacterial rhinosinusitis in children and adults. *Clin Infect Dis* 2012;54:e72-e112.
4. Shulman ST, Bisno AL, Clegg HW, et al. Clinical Practice Guideline for the Diagnosis and Management of Group A Streptococcal Pharyngitis: 2012 Update by the Infectious Diseases Society of America. *Clin Infect Dis* 2012;55:1279–1282.
5. Fashner J, Ericson K, Werner S. Treatment of the common cold in children and adults. *Am Fam Physician*. 2012;86:153-159.