

Comprehensive Antibiogram Toolkit: Phase 4 Quality-Improvement Review Tool for Antibiotic Use in Urinary Tract Infections

The goal of this tool is to allow nursing home staff to review empiric antibiotic choices recorded in the Antibiotic-Use Tracking Sheet to see if prescribing is consistent with national guidelines and with the nursing home's resistance/susceptibility patterns. The review will classify each antibiotic as:

- Significant resistance (<80 percent sensitive) or no significant resistance on the nursing home antibiogram,
- Narrow or broad spectrum, or
- Appropriate or potentially inappropriate, based on guidelines.

As clinical guidelines exist for uncomplicated urinary tract infections (UTIs), this classification should not include residents with complicated UTIs. Complicated UTIs should include at a minimum: UTIs in residents with indwelling urinary catheters, recent UTIs (within 2 weeks), and pyelonephritis. Categories are based on the 2010 Infectious Diseases Society of America guidelines.¹

List of Antibiotics for Urinary Tract Infections: Appropriateness

Resistance Pattern

- Significant resistance: The nursing home's antibiogram shows <80 percent sensitivity for the antibiotic prescribed.
- No significant resistance: The nursing home's antibiogram shows ≥80 percent sensitivity for the antibiotic prescribed.

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 Mar;52(5):e103-20. PMID: 21292654.

