Evaluating appropriate antimicrobial selection and duration of therapy for urinary tract infections in outpatient clinics

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Limited data exists to describe antimicrobial prescribing practices for urinary tract infections (UTIs) in the ambulatory care setting. Documentation and analysis of current outpatient utilization patterns are essential to discover compliance to prescribing guidelines, set a benchmark for optimization potential, and work toward improving antimicrobial stewardship.

**Background**

1. Determine degree of compliance with institutional antibiotic prescribing guidelines in the ambulatory setting
2. Compare compliance rates between prescriber types and clinic types

**Specific Aims**

1. Determine degree of compliance with institutional antibiotic prescribing guidelines in the ambulatory setting
2. Compare compliance rates between prescriber types and clinic types

**Methods**

All patients from January to December 2016 who received a UTI diagnosis (N30) from an outpatient clinic (Figure 1). Treatment algorithm (Figure 2) and patient factors (Table 1) used to determine appropriateness of treatment (Figures 5-6). Patient who were male; had a urinary obstruction, abnormality, or recent surgery; or other significant co-morbid conditions were considered to have a complicated UTI.

**Results**

- Among a wide network of ambulatory clinics, non-guideline concordant antibiotics are selected 77% of the time, including a large proportion of fluoroquinolone use.
- Emphasis should be placed on accurate charting of patient allergies, complicatedness of infection, and obtaining urine cultures to aid in antibiotic selection.
- Duration selection was more commonly guideline concordant than drug selection.
- These data provide targets to aid in antimicrobial stewardship efforts in the outpatient setting, with drug selection being an important target for interventions.

**Conclusions**

Antimicrobial stewardship efforts and education for prescribers, with a focus on adherence to institutional guidelines, are necessary to address suboptimal prescribing patterns for UTIs in the ambulatory setting.