

Prescriber Adherence to System-Wide Urinary Tract Infection Guidelines in Ambulatory Care Clinics

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BACKGROUND

- Antimicrobial stewardship (AMS) practices are well established in acute care settings
- Recently AMS has expanded into ambulatory care clinics
- About 80% to 90% of prescribed antibiotics are in the ambulatory clinic setting
 - About 52% of these prescriptions are unnecessary
- Urinary tract infections (UTIs) are commonly treated in this setting
- Most common treatment variations are:
 - Drug Selection
 - Duration of therapy
- There is an opportunity to promote AMS by adhering to guidelines derived from IDSA recommendations and institutional antibiograms
- Other institutional studies show increased appropriateness after implementation of institutional guidelines for empiric antibiotics

Time Point	Percentage
Before Guideline	34%
After Guideline	62%

METHODS

- Study Design: **Retrospective Review**
- Population: 100 people
- System-wide UTI guidelines were implemented previously
- Live education about this guideline and how to access was given to providers

Primary Endpoint

- Percentage of patients prescribed an empiric, guideline-adherent antibiotic regimen to treat an acute uncomplicated UTI

Secondary Endpoints

- Appropriate duration of therapy
- Appropriate dose
- Patients who were candidates for first-line antibiotics but did not receive it
- Patients with recurrent UTI

Inclusion Criteria

- Adults 18 years and older
- Prescribed an oral antibiotic for treatment of acute uncomplicated UTI by a Froedtert primary care provider

Exclusion Criteria

- Men
- Patients with:
 - Pyelonephritis
 - Indwelling urinary catheter
 - Spinal cord injury
 - Nephrostomy tubes
 - Planned invasive urologic procure
 - Renal transplant
 - Neutropenia
 - Non-verbal patients

System-wide adherence to guidelines was 49%

RESULTS

Primary Outcome

- System wide adherence uncomplicated cystitis guideline adherence by primary care providers was **49%**

Secondary Outcomes

- Primary reason for non-adherence was duration of therapy**
 - Inappropriate 42% of the time
 - All inappropriate durations were longer than recommended in the guidelines
- Most frequently selected antibiotics
 - Nitrofurantoin (48%)
 - This was drug of choice for 90% of the population
 - Sulfamethoxazole/Trimethoprim (35%)
 - Most frequently prescribed with correct dose and duration (60%)
- Recurrent UTI occurred in 11% of patients

OBJECTIVES

Primary: Assess provider adherence to system-wide guidelines for acute uncomplicated UTIs

Secondary: Evaluate utilization of antibiotic regimens for treatment of acute uncomplicated UTIs

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FUTURE DIRECTIONS

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graph LR; A[Analyze which clinics were least adherent] --> B[Inquire about prescriber hesitancy to prescribing nitrofurantoin]; B --> C[Implement stronger educational material to prescribers about institutional guidelines]; C --> D[Similar study with different diagnosis];
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