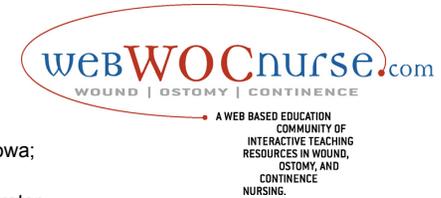


Attacking Inappropriate Antibiotic Use for Asymptomatic Bacteriuria in LTC through a Comprehensive UTI Prevention Protocol



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Purpose

- Distinguish between symptomatic UTI and asymptomatic bacteriuria (ASB).
- Describe the implementation of a **Comprehensive UTI Prevention Protocol**.

Background

Urinary tract infection (UTI) is one of the most common infections treated in long term care (LTC). Providing appropriate prevention and treatment of UTI's has been identified by The Centers for Medicare & Medicaid Services (CMS) 2006 F-315 Tag as a component of effective urinary incontinence management for all residents in LTC.

However, 25-50% of women and 15-40% of men in LTC have asymptomatic bacteriuria (ASB), a condition that mirrors UTI with a positive urine culture but lacks typical (UTI) symptoms (i.e., frequency, flank pain). ASB *does not* benefit from antibiotics. Thus distinguishing between symptomatic UTI and ASB is imperative to reduce inappropriate antibiotic use, potential resistance, and transmission of resistant bacteria.

Methods

A UTI Prevention Protocol was implemented in a 200-bed LTC facility in North Iowa. Since there is a considerable lack of clinical knowledge in distinguishing between ASB and UTI, appropriate prevention and treatment of UTI's in the LTC resident required considerable **education and re-education** of the nursing staff, nursing assistants, families and friends of the residents as well as the primary care providers (PCP's).

Education topics included: difference between ASB and symptomatic UTI, when to treat a UTI in the resident with an indwelling catheter, and when to communicate UTI symptoms to PCP.



UTI Prevention Protocol

Step 1: CNA communicates to charge nurse presence of 1 or 2 of the following symptoms:

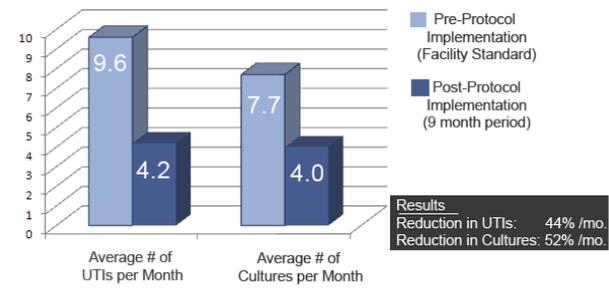
- Worsening of mental or functional status
- Temperature ≥ 100.4 or CHILLS
- Change in character of urine from baseline
- NEW pain or burning with urination
- New Increase in frequency or NEW incontinence
- New flank/suprapubic pain or tenderness

Step 2: Initiate 3-day UTI Prevention Protocol (place reminders, "UTI symptoms" form and urine collection receptacle in designated locations).

Step 3: CNA provides interventions as outlined in "Nursing Measures for 1-2 UTI Symptoms" form and records documentation.

Step 4: If additional UTI symptoms develop, PCP is notified and order for catheterized UA with C&S obtained.

Step 5: Day 4 of UTI Prevention Protocol: Discontinue protocol if symptoms abate. Initiate another 3-day Protocol if one symptom continues.



Conclusion

The comprehensive UTI Prevention Protocol was effective in this small convenience sample of LTC residents at reducing the number of ASB conditions with culture and antibiotics. This type of intervention provides an opportunity for continence nurse specialists to offer services that prevent UTI's while developing a plan of care to attack inappropriate antibiotic use for ASB.

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