



Appropriate evaluation and treatment of UTI in the Elderly

During the past year, several Massachusetts long term care facilities participated in the pilot round of this quality improvement initiative, responding to published evidence about over-diagnosis of UTI in residential elderly and growing risks of unnecessary antibiotic use. Participating facilities demonstrated an *average 30% decrease in the rate of urine cultures, 40% decrease in the diagnosis of UTI and an almost 50% decrease in reported cases of c. difficile infection.*

This program is led by the Massachusetts Coalition for the Prevention of Medical Errors (Coalition) in conjunction with Massachusetts Senior Care Association and the Massachusetts Department of Public Health, with funding from the Centers for Disease Control and Prevention. Educational programs are also presented in partnership with Masspro.

Antibiotics are among the most commonly used class of medication in long term care facilities; up to 70% of residents receive an antibiotic annually with an estimated cost between \$38 million and \$137 million nationally. Antibiotic use in the long term care population places elderly residents at increased risk of antibiotic resistance, harmful drug interactions, and drug-related adverse effects, including the development of *Clostridium difficile* infection (CDI), which is contagious and can lead to death.

Urinary tract infections are the most common infection treated with antibiotics in long term care facilities. In many cases, residents are treated for what is presumed to be a urinary tract infection based on positive results of urine studies that actually represent harmless bacterial colonization of the bladder. In fact, 30-50% of elderly long term care residents have a positive urine culture in the absence of infection, a condition known as asymptomatic bacteriuria.

Optimal management of urinary pathogens in long term care residents can be effective in reducing undesirable outcomes, enhancing quality of care for individuals, and reducing antibiotic resistance across the community. Studies have demonstrated the potential to improve appropriateness of antibiotic prescribing for suspected UTI in elderly residents without increasing hospital admissions or mortality.

The Massachusetts Senior Care Association will continue the partnership with Massachusetts Coalition for the Prevention of Medical Errors and the Massachusetts Department of Public Health to promote appropriate evaluation and treatment of urinary tract infections (UTI) in elderly long term care residents.

This collaborative program will run from September 2013 through July 2014, and feature the following:

- Multidisciplinary teams from long term care facilities and long term care acute care hospitals
- State-wide and regional workshops, and conference calls featuring local and national experts
- Coaching in front-line staff engagement and organizational change
- Core content based on national guidelines and evidence based practice including:
 - Graphic, brief educational materials and decision making support tools to use with your staff
 - Materials to educate patients, residents, and families about the risk of antibiotic overuse
 - Targeted measurement and brief reporting for learning and sharing, and to track improvement

Resources available for long term facilities and long term acute care hospitals use can be found at:

<http://www.macoalition.org/evaluation-and-treatment-uti-in-elderly.shtml>