Antibiotics are among the most commonly prescribed medications in long-term care facilities. Reports show that 25-75% of systemic antimicrobials are prescribed inappropriately, often for asymptomatic bacteriuria. Quality Improvement (QI) learning collaboratives and adaptive/culture change strategies have been demonstrated as successful approaches to improving care.

**Methods**

We developed a QI collaborative program to improve the management of suspected urinary tract infection in the elderly. The curriculum reviewed appropriate culture and treatment indications during 2 full day workshops, a series of webinars, 4 conference calls and one-to-one coaching sessions (Figure 1).

The curriculum also included a range of adaptive strategies to actively engage staff in making change. Educational and practice support tools were developed based on principles of adult learning theory, and educational outreach (academic detailing). The program was carried out twice, first from November 2012 to June 2013 and a second time from October 2013 to June 2014.

**Background**

Seventeen facilities participated in the first collaborative. An additional 13 participated in the second collaborative only. Twelve participated in both.

- Rates of diagnosis of UTI and urinary cultures sent before and during the collaborative are shown in figures 2, 3, and 4 for the facilities participating in the first collaborative, both collaboratives, and just the second one, respectively.
- Rate ratios comparing the above measures and *C. difficile* incidence rate before and during the collaborative are shown in Table 1.

**Results**

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**Conclusions**

Following a QI collaborative program to improve practice in testing and diagnosis of bacteriuria, there was a decrease in infection diagnoses and urine culture rates reflective of an improved understanding of when to culture and an improvement in appropriate diagnosis. During this time period, there was a non-significant decrease in *C. difficile* infection rate which may have been due in part to decreased antibiotic usage, although this was not measured. These data support a reasonable model for other healthcare systems to utilize to improve care of long-term care facility residents who are at risk for unnecessary antibiotic treatment for asymptomatic bacteriuria.