Clostridium difficile is a bacterium implicated as a major cause of antibiotic-associated diarrhea in the hospital setting. It can cause a spectrum of clinical implications from asymptomatic colonization and infectious diarrhea to life threatening inflammation of the colon and death.

Other Facts:
- Leading cause of healthcare-associated infection (HAI)
- Responsible for significant morbidity, mortality and healthcare costs
- C. difficile associated with almost half a million infections and 29,000 deaths in the US (2011)
- Costs to acute care hospitals related to C. difficile infection (CDI) estimated in excess of 4.8 billion dollars annually

CHS NorthEast saw an increase in the number of CDIs with a total of 38 infections in 2016 and 46 infections in 2017. The year-end SIR for 2016 was 0.53 and during 2017 it was 0.70 at CHS NorthEast.

The project goal was to reduce the number of CDIs at CHS NorthEast through implementation of a team-based review and feedback process.

In an effort to reduce infections, CHS NorthEast created the PSI Steering Committee to evaluate all hospital-acquired C. difficile cases and identify trends, opportunities for improvement, and promote accountability for the spread of infection.

The interprofessional team includes nursing leadership, Infection Prevention, Performance Improvement, Clinical Nurse Specialists, Clinical Nurse Educators, Patient Safety, the hospital epidemiologist, Antimicrobial Support Network (ASN) pharmacist, Chief Medical Officer, environmental services, and others as needed.

CHS NorthEast observed a reduction in CDI cases starting in quarter 4 2017. CDI rates dropped from 10 in quarter 1 2018 to 2 in quarter 2 2018. The team attributes this to focused work of the PSI Steering Committee and improvements to screening criteria in the EMR. Education was a heavy focus in the first two quarters of 2018, which also contributed to this reduction. Additionally, cost avoidance related to this work was significant. Utilizing the APIC calculator, it was determined that 49 fewer than expected CDIs totaled $200,704 in cost avoidance.