Facility-wide Inpatient Clostridium difficile (C. diff) Laboratory-identified Events

NQF#: 1717

Developer: Centers for Disease Control and Prevention (CDC)

Data Source: Leapfrog Hospital Survey; CMS

Description: Standardized infection ratio (SIR) of hospital-onset CDI Laboratory-identified events (LabID events) among all inpatients in the facility.

Rationale: Clostridium difficile is responsible for a spectrum of C. difficile infection (CDI) complications, including uncomplicated diarrhea, pseudomembranous colitis, and toxic megacolon which can, in some instances, lead to sepsis and even death. In recent years, a previously unrecognized strain of C. difficile with increased virulence and high levels of antimicrobial resistance has resulted in outbreaks in health care facilities in the United States. Additionally, CDI has become more common in the community setting, with increased risk in those with a recent inpatient stay in a health care facility. Significant increases in the cost of inpatient care and post-hospitalization care have been seen in cases of CDI.

Citations for Rationale:

- An Epidemic, Toxin Gene-Variant Strain of Clostridium difficile. N Engl J Med, 2005. 353(23):2433-2441.
- Recommendations for Surveillance of Clostridium difficile-associated Disease. Infect Control Hosp Epidemiol, 2007. 28(2):140-145.
- Short and Long-Term Attributable Costs of Clostridium difficile-associated Disease in Nonsurgical Inpatients. Clin Infect Dis, 2008. 46(4):497-504.

Impact:

- Affects many hospitalized patients
- Leading cause of morbidity/mortality
- Severity of illness

Opportunity:

- Opportunity for improvement exists, as demonstrated by the coefficient of variation for the measure

Evidence:

- Clinical practice guidelines based on expert opinion, systematic synthesis of research

Citations for Evidence:

- McDonald, C.L. et al, Clinical Practice Guidelines for Clostridium difficile Infection in Adults and Children: 2017 Update by the Infectious Diseases Society of America (IDSA) and Society for Healthcare Epidemiology of America (SHEA), Clinical Infectious Diseases, Volume 66, Issue 7, 1 April 2018, Pages e1–e48, https://doi.org/10.1093/cid/cix1085