

Quality Improvement Project: Reducing Hospital-acquired CDI Using a Multi-disciplinary Approach

Podium Presentation
Mary Shanks, MSN, RN, CIC, Jessica Woodruff, BSN, RN, CCRN, Adam Haslam, MHA

Background

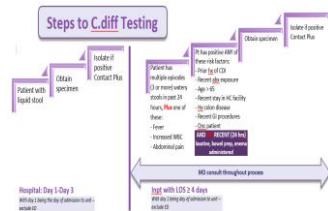
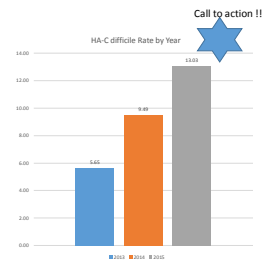
Clostridium difficile is estimated to cause more than 453,000 infections and 29,300 deaths annually in the United States (NEJM, 2015). Symptoms of *Clostridium difficile* infections (CDI) may range from diarrhea to life-threatening inflammation of the colon. Usually occurring after the use of antibiotics, CDI commonly affects individuals who have stayed in a hospital or long-term healthcare facility.
For hospitals, positive test results for C diff have been reportable in Oregon since 2012, and to CMS since 2013. Many facilities use internal rates as a Quality Measure.

Clostridium difficile Definitions (CDC) LabID Event

- Community-Onset:** collected as outpatient or inpatient 3 or less days post admit. Day 1,2 or 3 with day 1 being admission.
- Community-Onset Healthcare facility –associated:** collected as outpatient less than 4 weeks post discharge. (not included)
- Healthcare Facility Onset:** Positive lab test collected after day 3.

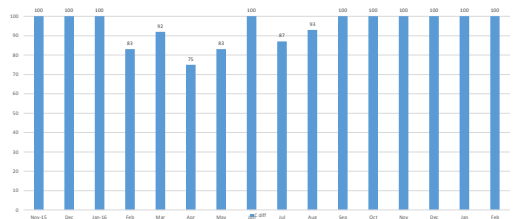
Early Efforts 2014-15

Focus on lab testing to rule in or out.
IT tool- BPA pop-up when diarrhea documented, MD order set for testing.
Review of cases revealed:
Any/all loose stools sent:
• GI prep
• Laxatives
• Single episodes of diarrhea
This approach led to over-testing
• Also- missed opportunities- collected day 4 or later when s/s present earlier in admission
Needed to refine testing criteria to avoid false positive cases and promote timely collection

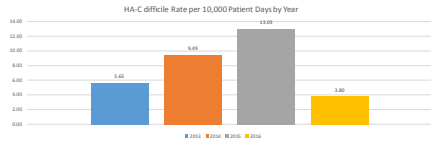


- IP/ Nursing/Informatics:**
- Reduce unnecessary testing
 - Steps to C diff testing- placed in every BR
 - Changes in BPA
 - Improve timeliness of testing
 - Specimen collection equipment placed in every pt bathroom
- Infection Prevention:**
- Daily rounding high risk patients
 - Share data with staff- look for opportunities to improve
 - Observation of isolation and hand hygiene practices
- EVS/IP/Administration:**
- Obtained funding for purchase UV disinfection system- 2 units
 - Tested and implemented new sporidical disinfectant for environmental surfaces- housewide
 - Develop program to UV disinfect every Contact Isolation room at time of patient discharge
 - Monitor effectiveness of cleaning

EVS UV Disinfection Rate: C diff isolation rooms Nov 2015-Feb 2017



Infection Prevention + Nursing+ Informatics + EVS+ Administration + Antibiotic Stewardship Teamwork.



C difficile Best Practice Alert (BPA)- triggered by documentation of diarrhea or loose stool in I&O fields

▼ Disease Management (Advisory: 1)

Recommend Collecting C. Difficile Specimen

WHO: This patient has been admitted for less than 4 days and the GI symptoms documented indicate that a C. Difficile test may be warranted.

ACTION: Choose the appropriate Acknowledge reason below and, if needed, release the pri order for C. Difficile testing on PLEX Orders and send a specimen to the lab.

Steps to C. Diff Testing
 Consulting Infection Prevention when sending a sample is recommended.

Revised by GSA, Last Reviewed January 2016.

Reference - Steps to C. diff testing

Acknowledge Reason

Specimen collected: Test not indicated: Specimen will be collected when available: Will alert primary RN: Emergency or Chart Review:

Accept & Stay | Done

Steps to C.diff Testing

