FLOYD Health System ~ ENVIRONMENT OF CARE
SUBJECT: *CLOSTRIDIOIDES DIFFICULE* DIAGNOSTIC STEWARDSHIP
NUMBER: FHS EC-05-021
EFFECTIVE DATE: 3/21

Clostridioides difficile Diagnostic Stewardship

PURPOSE

To ensure patients are tested appropriately for *Clostridioides difficile* to ensure proper diagnosis and treatment.

POLICY

Introduction

Clostridioides difficile infection (CDI) is one of the most common causes of healthcare-associated infection (HAI) in community hospitals and early and accurate diagnosis of CDI is paramount to providing optimal care for patients with this infection and decreasing risk of transmission to other hospitalized patients.

Antimicrobial exposure is one of the most important risk factors predisposing to CDI. Use of single dose of any type of antimicrobials in previous 90 days has been associated with CDI. High risk antimicrobials associated with CDI include clindamycin, cephalosporins, ampicillin, fluoroquinolones. Restriction of fluoroquinolones has been most essential due to risk of acquisition of hypervirulent BI/NAP1/027 strain of *C.difficile*. Hospital interventions with use of antimicrobial restriction or antimicrobial stewardship practice will help reduce incidence of CDI.

1. Restriction of antimicrobial agents associated with high risk for CDI is an important strategy to reduce exposure to these agents.

2. From stewardship aspect, monitoring appropriate indications for antimicrobial use and avoiding use of unnecessary antimicrobial agents is crucial to reduce incidence of CDI.

3. Another stewardship practice includes verification of appropriate treatment of CDI based on severity. If applicable, avoidance of use of concomitant non-CDI antimicrobial agents during CDI treatment.

Clinical Evaluation

The primary method to determine if a patient may have *Clostridioides difficile* infection (CDI) is a clinical evaluation. Clinical evaluation is used to determine if laboratory testing for CDI is appropriate.

1. Do not test asymptomatic patients for CDI.

2. Only test patients who are clinically likely to have CDI. Patient has 3 or more unformed, diarrheal stools in a 24 hour period without an underlying condition (inflammatory colitis, constipation with overflow diarrhea) or therapy (stool softeners/laxatives, chemotherapy, enteral feeding, oral contrast).

3. Only perform diagnostic tests on diarrheal stool specimens. Diarrheal stools are those that take the shape of the container.

4. Do not repeat testing during the same episode of diarrhea.

5. Do not perform test of cure as the assay may be positive after clinical cure.

6. Consult a pediatric specialist before testing children under 2 years of age.

7. On the rare occasion where an ileus due to *C. difficile* (which occurs in less than 1% of CDI cases) is suspected, the provider must specifically request testing on a formed stool specimen via verbal communication with lab personnel prior to specimen submission.

Laboratory Rejection Rules for Stool Specimens Sent for *Clostridioides difficile NAAT*

1. Formed stool
2. Hard stool
3. Swab specimens
4. Patient has positive NAAT within last 14 days

Recommended laboratory test

Nucleic acid amplification test (NAAT) with 2 Step algorithm with the EIA Toxin A/B (Floyd and Polk); EIA Toxon A/B (Cherokee).

Consider using laboratory results indicating colonization to inform infection prevention strategies, such as contact precautions. Colonized patients are those who have tested positive for the *Clostridioides difficile* organism or genome, but do not have clinical symptoms. These patients may have a role in *Clostridioides difficile* transmission.

References:

1. Georgia Healthcare Associated Infections: Advisory Committee Policy Statement

2. Duke Center for Antimicrobial Stewardship and Infection Prevention. Diagnostic Testing for Clostridioides difficile Infection. Published June 2015. https://dicon.medicine.duke.edu/sites/default/files/june_2015_dason_newsletter_diagnostic_testing_for_Clostridioides_difficile_infection_final.pdf

3. University of Michigan, Michigan Medicine. *Clostridioides difficile* Infection in Adults and Children. Published December 2016. http://www.med.umich.edu/1info/FHP/practiceguides/InptCDiff/C-Diff.pdf%20

4. Clinical Practice Guidelines for *Clostridioides 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, 19 March 2018, Pages e1–e48, https://academic.oup.com/cid/article/66/7/e1/4855916

Approved by:

Review Responsibility: Antibiotic Stewardship Committee, ID Consultant, Director of Infection Prevention, Director of Laboratory Services

Developed Date: 8/18

Review date/s: 12/20

Revision date/s: 3/21