

## Clostridioides Difficile Infection Policy

<b>Document No</b>	IP&C - 00021	<b>Version No</b>	1.0
<b>Approved by</b>	Policy Governance Group	<b>Date Approved</b>	28/11/2019
<b>Ratified by</b>	Infection Prevention & Control Committee	<b>Date Ratified</b>	10/01/2020
<b>Date implemented ( made live for use)</b>	15/01/2020	<b>Next Review Date</b>	10/01/2023
<b>Status</b>	LIVE		
<b>Target Audience-</b> who does the document apply to and <u>who should be using it.</u> - The target audience has the responsibility to ensure their compliance with this document by:	<ul style="list-style-type: none"> <li>• Ensuring any training required is attended and kept up to date.</li> <li>• Ensuring any competencies required are maintained.</li> <li>• Co-operating with the development and implementation of policies as part of their normal duties and responsibilities.</li> </ul>		
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<b>Special Cases</b>	None		
<b>Accountable Director</b>	Chief Nurse		
<b>Author/originator</b> – Any Comments on this document should be addressed to the author	Infection Prevention and Control Specialist Nurse		
<b>Division and Department</b>	Corporate – Infection Prevention and Control (IP&C)		
<b>Implementation Lead</b>	Infection Prevention and Control Specialist Nurse		
<b>If developed in partnership with another agency ratification details of the relevant agency</b>			
<b>Regulatory Position</b>	The Health and Social Care Act 2008: Code of Practice on the prevention and control of infections and related guidance (July 2015) (Ref 15).		
<b>Review period.</b> This document will be fully reviewed every three years in accordance with the Trust's agreed process for reviewing Trust -wide documents. Changes in practice, to statutory requirements, revised professional or clinical standards and/or local/national directives are to be made as and when the change is identified.			

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## Instant Information 1 – Summary Guidance on Management of Patients with Clostridioides Difficile Infection (CDI)

If patient has diarrhoea which suggests CDI, liquid stool/smell/green OR if stool result is *Clostridioides difficile* toxin positive (+ve)

- Isolate the patient in a side room. Use appropriate personal protective equipment (PPE) and use soap and water for hand hygiene.
- For suspected cases; send a stool specimen to the Microbiology Department for culture and *Clostridioides difficile* (*C.difficile*) toxin testing.
- Monitor diarrhoea using the Bristol stool scale (BSS) chart.
- Commence on oral Metronidazole 400 milligrams (mg) every eight hours (until *C. difficile* toxin result known). If known CD toxin +ve then follow treatment flowchart below. Intravenous (IV) Metronidazole is only an alternative if patients are nil by mouth (NBM). Do NOT give IV Vancomycin.
- Investigate for other causes of diarrhoea e.g. tube feeds, antacids, laxatives or other medication likely to cause diarrhoea.
- Anti-diarrhoeal agents should be stopped pending results since they should not usually be given to counteract diarrhoea resulting from CDI.
- Monitor fluid balance. Correct any dehydration due to diarrhoea.
- Ensure kidney function is maintained to prevent renal failure. (Consider acute kidney injury (AKI) Pathway).
- Monitor for signs of deterioration (including a rising C-reactive protein (CRP), falling albumin level, rising white cell count (WCC) and temperature) and assess daily using severity scoring criteria (see below).
- If evidence of acute abdomen and/or pseudomembranous colitis seek advice from surgical team/Gastroenterologists and inform Consultant Microbiologist.
- If clinically appropriate discontinue non *C. difficile* treatment antibiotics to allow normal intestinal flora to be re-established. If the patient requires antibiotics for an infection, review carefully and consider switching to lower risk antibiotics (generally narrow spectrum antibiotics are lower risk for developing CDI, avoid cephalosporins, clindamycin and quinolones if possible). If needed seek advice from microbiology, the antibiotic pharmacist or the *C.difficile* review team.
- Risk of developing *C. difficile* associated diarrhoea (CDAD) increases with proton pump inhibitor (PPI) use. Please review the indication for any PPI and discontinue where appropriate. Consider switch to Ranitidine. Further advice is available from the Consultant Gastroenterologist. Refer to guidance (Ref 25).

### Assessing severity of *Clostridioides difficile*

### Action

#### Mild

Normal WCC

Less than (<) three stools type 5-7 on Bristol Stool Scale Chart per day

#### Moderate

Raised WCC < 15x10<sup>9</sup>/L

Typically associated with three - five stools per day.

**Severe on diagnosis; or if symptoms persist or worsen after two-three days treatment; or if condition worsens.**

WCC more than (>) 15 x 10<sup>9</sup>/L

or acute rising serum creatinine (>50% increase above baseline)

or temp > 38.5 Degrees Centigrade (°C)

or evidence of severe colitis (abdominal or radiological signs)

(number of stools may be a less reliable indicator of severity)

Continue **oral Metronidazole 400 mg every eight hours for a total of 10 days** UNLESS this is a recurrence of *C. difficile* infection and patient has received a course of Metronidazole within last 28 days, then commence **oral Vancomycin 125 mg every six hours for 10 days**

Assess patient daily including review of severity markers, fluid/electrolytes.

If symptoms worsen see severe infection treatment guidance section.

Inform Consultant Microbiologist

Discuss with Gastroenterologist

Discuss with surgical team if evidence of acute abdomen/severe colitis

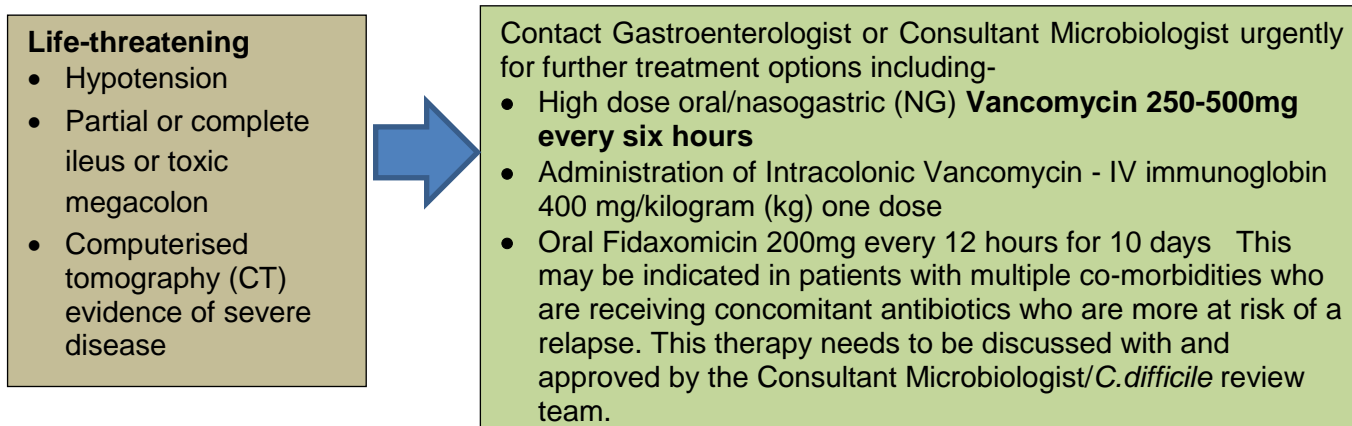
Consider abdominal X-ray

Switch to **oral Vancomycin 125mg every six hours for 10 days**

If NBM give IV Metronidazole 500mg every eight hours

Ensure nutrition and fluid balance maintained.

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All patients suffering from CDAD are reviewed on a weekly basis by the *C.difficile* review team.

**If severe infection continues or worsens, other treatment options need to be discussed with and approved by consultant Microbiologist/*C.difficile* review team.**

**Prevention of relapse of infection**

- For patients at high risk of recurrence of *C. difficile* infection a **tapering course** of oral **Vancomycin** can be prescribed post therapy. This will be advised when the patient is reviewed by the *C. difficile* review team.
- Consider switching PPI to Ranitidine. This will be advised when the patient is reviewed by the *C. difficile* review team or discuss with Consultant Gastroenterologist.

**Recurrence of *C.difficile* infection**

- Commence **oral Vancomycin 125 mg every six hours for 14 days**
- **Or oral Fidaxomicin 200mg every 12 hours for 10 days** Use of this therapy needs to be discussed with and approved by the Consultant Microbiologist/*C. difficile* review team.
- Consider **Faecal Transplant** see *C.difficile* policy and discuss with Gastroenterologist or Consultant Microbiologist

**Retesting samples**

- If original sample tested *C.difficile* toxin negative. Consider repeating after 24 hours if diarrhoea persists and is suggestive of *C.difficile* infection (green and smell). Consideration should be given to continuing metronidazole, please discuss with Consultant Microbiologist.
- If original sample test is positive, retesting is not required if the symptoms abate.
- Samples will not be retested within 28 days of a positive result unless discussed with Consultant Microbiologist.

**PCR Positive *C.difficile* carriage**

Toxin negative and PCR positive results may reflect *C.difficile* carriage or *C.difficile* infection (with false negative toxin result).

- Please assess patient:
- If no symptoms suggestive of CDI - indicative of carriage only.
- If patient is suffering from diarrhoea - please check for other causes. If diarrhoea is compatible with CDI, then result suggests false negative toxin result.
- In most cases suggest treat as per CDI treatment with Metronidazole or Vancomycin and follow guidance as above.
- Avoid antibiotics that are of higher risk of causing CDI if possible (broad spectrum antibiotics, clindamycin, cephalosporins and quinolones)

(Ref 2)

# 1 Introduction & Purpose

## 1.1 Introduction & Purpose

*Clostridioides difficile* (*C.difficile*) is spore-producing bacterium that may be found in the environment and as part of the normal faecal flora of healthy people, up to 3% of adults and 66% of babies, where it causes no symptoms. The spore can also be ingested following contact with a contaminated environment

*C. difficile* causes disease when the normal bacteria in the gut (also known as the gut flora) are disturbed, usually by someone taking antibiotics. This allows *C. difficile* to grow to unusually high levels. It also allows the toxin that some strains of *C. difficile* produce to reach levels where it attacks the intestines and causes mild to severe diarrhoea.

The *C.difficile* spore can remain dormant in the environment for months or even years.

This policy details the procedures to follow for managing and preventing cases including clinical treatment regimens and decontamination requirements.

## 1.2 Glossary/Definitions

The following terms and acronyms are used within the document:

<b>+ve</b>	Positive
<b>&lt;</b>	Less than
<b>&gt;</b>	More than
<b>+</b>	Plus
<b>CM</b>	Centimetre
<b>%</b>	Percentage
<b>°C</b>	Degrees Centigrade
<b>15 x 10<sup>9</sup>/L</b>	10 <sup>9</sup> cells/liter
<b>AKI</b>	Acute Kidney Injury
<b>BD</b>	Twice daily/every twelve hours
<b>BSS</b>	Bristol Stool Scale - a medical aid designed to classify the form of human faeces into seven categories.
<b><i>C. difficile</i></b>	<i>Clostridioides difficile</i>
<b>CCG</b>	Clinical Commissioning Group
<b>CDAD</b>	<i>Clostridioides difficile</i> associated diarrhoea
<b>CDI</b>	<i>Clostridioides difficile</i> Infection
<b>CDRN</b>	<i>Clostridioides difficile</i> ribotyping network
<b>CDT</b>	<i>Clostridioides difficile</i> toxin
<b>CDI</b>	<b><i>Clostridioides difficile</i> Infection</b> Defined as one episode of diarrhoea, defined either as stool loose enough to take the shape of a container or Bristol Stool Scale (BSS) types 5-7 and that occurs at the same time as a positive <i>C.difficile</i> toxin assay and/ or endoscopic evidence of pseudomembranous colitis.
<b><i>Clostridioides difficile</i> Multi-disciplinary team</b>	Consists of a Consultant microbiologist, consultant gastroenterologist, IP&C specialist nurse, dietician and an Antibiotic Pharmacist.
<b>CDT</b>	<b><i>Clostridioides difficile</i> toxin</b> The <i>Clostridioides difficile</i> bacterium is difficult to culture so a positive toxin test is used as confirmation of CDI.
<b>Cohorted</b>	The practice of nursing together more than one patient with the same

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	infection, in a ward or bay rather than in single rooms.
<b>Community in-patients</b>	In-patients in Community Hospitals in the former Wiltshire Community Health Services (WCHS).
<b>CQC</b>	Care Quality Commission
<b>CRP</b>	C- reactive protein ( A marker of inflammation in the body)
<b>CT</b>	Computerised tomography
<b>CDRN</b>	<i>Clostridioides difficile</i> ribotyping network
<b>Diarrhoea</b>	An abnormally frequent discharge of semisolid or fluid faecal matter from the bowel. Bristol Stool Scatye 5-7 stools are classified as diarrhoea.
<b>DIPC</b>	Director of Infection Prevention and Control.
<b>EDRMS</b>	Electronic Document and Records Management System
<b>EIA</b>	Equality Impact Assessment
<b>EIA</b>	enzyme immunoassays
<b>EPMA</b>	Electronic Prescription and Medicines Administration
<b>GDH</b>	Glutamate dehydrogenase
<b>GP</b>	General Practitioner
<b>GWH</b>	The Great Western Hospital
<b>Hand hygiene</b>	A general term referring to any action of hand cleansing.
<b>HCAI</b>	Healthcare Associated Infection
<b>HPI</b>	Human Probiotic Infusion
<b>ICC</b>	Infection Control Committee
<b>Ileus</b>	An Ileus (Intestinal obstruction) is a partial or complete non-mechanical blockage of the small and/or large intestine.
<b>Immunosuppression</b>	Impaired immune response that renders the host particularly susceptible to infection: May be due to age; impaired anatomical barriers (wounds, indwelling medical devices); impaired cellular or host defence: genetic or acquired, underlying malignancy, chronic infection, immunosuppressive drugs.
<b>IP&amp;C</b>	Infection Prevention and Control
<b>IR1</b>	Trust electronic incident reporting form
<b>IV</b>	Intravenous
<b>kg</b>	kilogram
<b>mg</b>	Milligram
<b>Mg/kg</b>	Milligram/ kilogram
<b>NBM</b>	Nil by mouth
<b>NG</b>	Naso-Gastric
<b>NHS</b>	National Health Service
<b>NPSA</b>	National Patient Safety Agency
<b>PCR</b>	Polymerase Chain Reaction. A technique for amplifying DNA sequences used to detect and identify bacterial strains.
<b>PII</b>	<b>Period of Increased Incidence</b> Two or more new cases of CDI (occurring within forty-eight hours post admission, not relapses) in a twenty eight day period on a ward.
<b>PHE</b>	Public Health England
<b>PPE</b>	Personal Protective Equipment
<b>PPI</b>	Proton pump inhibitors. A group of drugs that reduce the secretion of gastric (stomach) acid.
<b>PPM</b>	Parts-per-million
<b>PQC</b>	Patient Quality Committee
<b>PRN</b>	Used in medication prescribing to mean “when required” from Latin “pro re nata”.

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<b>Pseudomembranous colitis</b>	A potentially fatal condition where severe inflammation of the colon causes tissue damage resulting in pseudomembrane formation within the bowel.
<b>QDS</b>	Four times daily/ every six hours
<b>RCA</b>	Root Cause Analysis
<b>Ribotyping</b>	Laboratory analysis of ribonucleic acid genes that is used for differentiating between strains of bacteria.
<b>SIGHT</b>	Suspect, Isolate, Glove, Hand, Test
<b>TDS</b>	Three times daily/ every eight hours
<b>Toxic megacolon (megacolon toxicum)</b>	A life-threatening complication of other intestinal conditions. It is characterized by a seriously dilated colon, accompanied by abdominal distension, bloating and sometimes fever, abdominal pain or shock.
<b>UK</b>	United Kingdom
<b>WCC</b>	White cell count

## 2 Main Document Requirements

### 2.1 Background Information

*Clostridioides difficile* (*C. difficile*) is a spore-producing bacterium that may be found in the environment and as part of the normal faecal flora without causing symptoms.

*Clostridioides difficile* infection (CDI) is associated with the use of antibiotics and causes a spectrum of disease from mild diarrhoea to severe and life threatening conditions. Incubation can be up to eight weeks after antibiotic exposure but normally either during the antibiotic course or within two weeks of its end.

Clinical signs and symptoms may include abdominal pain, profuse, foul smelling diarrhoea, and fever. Explosive diarrhoea, mucous and blood may be present. Other symptoms include high white blood cell counts, lower abdominal pain and systemic symptoms such as nausea and malaise. In severe cases of infection; diarrhoea may not be prominent. In some cases there is severe inflammation of the colon (known as pseudomembranous colitis) and occasionally toxic megacolon which in extreme cases can result in death.

CDI is transmitted by clostridial spores, which are shed in large numbers by infected patients and are resistant to drying, heat and many disinfectants. Therefore, they may survive in the environment for long periods and may be transmitted to other patients via hands of employees or inanimate objects.

Those particularly at risk of *Clostridioides difficile* infection include:

- Those over sixty-five years of age.
- People who have recently undergone bowel surgery.
- People with serious underlying diseases.
- Those that have had a recent course or repeated courses of antibiotics.
- Immunosuppressed patients.
- Those who have had previous infection.
- Those who have had a prolonged in-patient stay.

### 2.2 Prevention of CDI

Prevention of CDI relies on both preventing, as far as possible, patients' exposure to the organism and ensuring they do not become susceptible through disruption of the normal gut flora allowing germination of *Clostridioides difficile* spores.

Thus, intervention for control of CDI can be divided into:

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- A) Infection Prevention and Control Precautions.
- B) Responsible Antibiotic Prescribing.
- C) Environmental decontamination.

The Great Western Hospitals NHS Foundation Trust (the Trust) has developed antibiotic guidelines that advise narrow spectrum agents alone or in combination for empirical and definitive treatment where appropriate. These guidelines avoid the use of Clindamycin and second- and third-generation cephalosporins (especially in the elderly) and minimise the use of fluoroquinolones, carbapenems and prolonged courses of antibiotics. Please see the Trust Antibiotic Treatment Guidelines available on the Trust intranet (Ref 4, 5, 6, 7) and seek advice, if needed, from the Antimicrobial management team/microbiologist/pharmacist on choice of antibiotics.

### Potential for antibiotics to cause CDI

High Risk	Medium Risk	Lower Risk
Cephalosporins	Amoxicillin	Aminoglycoside
Clindamycin	Co-trimoxazole	Metronidazole
Meropenem	Macrolides	Tazocin
Fluoroquinolones	Tetracyclines	Penicillin / Flucloxacillin
	Trimethoprim	Rifampicin
	Co-amoxiclav	Glycopeptides

### 2.3 Management of Potentially Infectious Diarrhoea

Clinicians (doctors and nurses) must apply the following mnemonic protocol (SIGHT) when managing patients with suspected potentially infectious diarrhoea:

<b>S</b>	Suspect that a case may be infective where there is no clear alternative cause for diarrhoea.
<b>I</b>	Isolate the patient and consult with the IP&C Team while determining the cause of the diarrhoea.
<b>G</b>	Gloves and aprons must be used for all contacts with the patient and their environment.
<b>H</b>	Hand washing with soap and water should be carried out before and after each contact with the patient and the patient's environment.
<b>T</b>	Test the stool for toxin, by sending a specimen immediately.

### 2.4 Specimen Collection for CDI Toxin Testing (At Acute Hospital)

- Check electronic patient record system for previous results/check if patient has had a recent sample sent to another laboratory;
- Patients with positive results in the last month (twenty eight days) will not be re-tested unless discussed with the Consultant Microbiologist;
- **Do not send specimens for clearance of *Clostridioides difficile*;**
- Formed stools will not be tested; only send liquid or loose stools that take the shape of the Send stool specimen securely in a stool specimen container to microbiology for *Clostridioides difficile* toxin (CDT) stating clinical details and any antibiotic treatment given. Samples will be rejected by the laboratory if they have leaked in transit, if there is evidence of external contamination of the container, or if an inappropriate container has been used (Ref 21).

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- More than one test per patient **may** be required if the first test is negative. If there is a strong clinical suspicion of *C. difficile* infection, send a second sample twenty-four hours later. Further tests might be necessary in light of clinical evidence and on advice of the IP&C team.
- Samples from children under the age of two will not be tested for *Clostridioides difficile*.
- Please refer to the document: "What will a stool sample be tested for in the GWH laboratory?" (Ref 7).
- Positive specimen results are phoned to the clinical area and discussed by GWH microbiologist.

## 2.5 Laboratory Testing for Diagnosing CDI

There are a number of tests that can be used to diagnose CDI. No one test is considered to have the ideal features to rapidly detect CDI, therefore a combination of tests is used. These tests include:

- Glutamate dehydrogenase (GDH) enzyme immunoassays (EIA) tests detect the presence of an antigen that is produced in high amounts by *C. difficile*. As GDH is present in both toxin producing and non-producing *C. difficile*, this test cannot be used alone to diagnose CDI. It can be used to rule out CDI, and in combination with a follow-up test to determine the presence of toxin in samples that are positive by the GDH test.
- *C. difficile* toxin enzyme immunoassays (EIA) detect *C.difficile* toxins in the stool sample. They are relatively rapid (producing a result within hours), but can have low sensitivity, missing up to 30% of cases. For this reason, it is recommended that these assays are only used in combination with other tests to detect CDI.
- Molecular tests, such as Polymerase Chain Reaction (PCR) detect the presence of *C. difficile* and the genes that produce the toxins. They are rapid (producing a result within a few hours) and very sensitive, but do not distinguish between CDI and colonisation (presence of *C. difficile* that is not producing toxin). The laboratory at Great Western Hospital (GWH) has the facility for this test.

The United Kingdom (UK) Department of Health & Social Care recommend that the testing procedure should include two steps, the first of which should be a molecular test or a GDH EIA test and the second should be a toxin EIA test.

### 2.5.1 Laboratory Testing for CDI for Inpatients at GWH

The GDH (EIA) test is performed on all liquid and semi-formed stools on inpatients more than (>) two years. If a sample is from the community/GP surgery then samples are tested on patients 65+ years or if requested. This is in line with national PHE guidance (Ref 1).

The outcome of the GDH (EIA) test determines next laboratory step and reporting:

GDH (EIA) test Negative – no further testing: '*C.difficile* Negative' report issued with no further laboratory action

GDH (EIA) test Positive – further CD toxin EIA test (Positive): Both results positive, report issued as '*C difficile* infection'

GDH (EIA) test Positive - further CD toxin EIA test (Negative):

*Inpatients:* further PCR test performed

If negative PCR, test report issued as 'Consistent with non-toxin producing *C difficile* detected'

If positive PCR, test report issued as 'Consistent with *C difficile* carriage'

*Other patients:* '*C.difficile* Negative' report issued with no further laboratory action

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## 2.6 Management for Patients with Diarrhoea Suggestive of CDI

If an infectious cause for diarrhoea has not been excluded the patient must be isolated immediately and a stool specimen sent for *Clostridioides difficile* testing. *C.difficile* diarrhoea can present alongside other attributable causes for diarrhoea e.g. melaena, laxatives and antibiotics.

- Isolate patient in a single room. (Ref: 9) The door to the isolation room must remain closed. When a closed door is considered detrimental to other aspects of the patient's clinical care, decisions must be informed by risk assessments and documented within the patient record.
- Investigate for other causes of diarrhoea e.g. tube feeds, PPI, antacids, laxatives.
- The patient must be monitored daily for the frequency and severity of diarrhoea, recording bowel actions using the Bristol Stool Form Scale as at Appendix B.
- All antibiotics that are clearly not required must be stopped. Contact Consultant Microbiologist for advice if patient still needs antibiotic therapy.
- A review of medication should be undertaken; including those drugs that may cause diarrhoea and the need for PPIs.
- Stop anti-motility drugs e.g. Loperamide, codeine (they must not be given to counteract diarrhoea resulting from *Clostridioides difficile* infection or infectious diarrhoea) and laxatives.
- Start treatment for *Clostridioides difficile* diarrhoea - see treatment section 2.8.
- Commence supportive measures as indicated i.e. fluid resuscitation, electrolyte replacement and nutrition review.
- If original sample tested *Clostridioides difficile* toxin negative, consider repeating after twenty-four hours if diarrhoea persists and is suggestive of *Clostridioides difficile* infection (Stool smells offensive/green appearance). Consideration must be given to continuing Metronidazole, please discuss with Consultant Microbiologist.
- Apply Infection Control Principles for the management of patients with suspected/confirmed CDI including; isolation, standard precautions and hand hygiene (Refs 9,10, 11)
- Ensure Serco (GWH site) or Hotel Services (Community Hospitals) are informed to enable twice daily cleaning of room with chlorine based agent. The IP&C team will ensure Serco are informed on a daily basis of those rooms on the GWH site that have an on-going need for twice daily cleans.

Four main Infection Control factors have been identified as being necessary to reduce the incidence of CDI, which if rigorously applied, would reduce the risk of cross-infection: these are isolation, use of PPE, Hand hygiene and enhanced environmental cleaning (Ref 9, 10, 11, 12, 13, 14).

### 2.6.1 Isolation of Patients with Diarrhoea

- Patients with diarrhoea must be nursed in single rooms, preferably with en-suite facilities, in line with the Isolation Policy (Ref 9). Isolation signs must be placed on the single room door. The door must remain shut, unless this compromises patient safety and an individual risk assessment is documented in the patient's record.
- When a single room is not immediately available implement isolation precautions around the infected patient's bed space.
- To facilitate isolation of the affected patient in a single room please contact the IP&C team/Site Manager (GWH site) or for Community hospitals the IP&C team/on-call manager to assist in identifying patients who could be moved.
- **Patients with diarrhoea should not be routinely transferred to other wards, hospitals or health care facilities. Please see section 2.10 for further information.**
- Under extreme circumstances patients may need to be cohorted if there is a shortage of single rooms. This option must be discussed with IP&C or with a Consultant Microbiologist before instigation.
- Where patients need to attend departments for essential investigations, they must be 'last on the list' unless earlier investigations are clinically indicated. In the advance of transfer, the receiving

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area must be notified of the patient's CDI status. Arrangements must be put in place to minimise the patient's waiting time and hence contact with other patients.

- The patient must remain isolated until there has been no diarrhoea (types 5-7 on the Bristol Stool Form Scale (Appendix B)) for at least seventy-two hours, and a formed stool has been achieved (types 1-4). A clinical review must be undertaken in conjunction with nursing, medical and IP&C employees prior to discontinuing isolation of the patient.

### 2.6.2 Use of Personal Protective Equipment (PPE)

Appropriate PPE, for example, plastic aprons and gloves **must** be worn for all patient contacts, and when cleaning patient equipment or their environment in line with the standard precautions policy (Ref 10). Used gloves and aprons must be disposed of in a clinical waste bag for infected waste (Ref 12).

### 2.6.3 Hand Hygiene

- Hands must be **washed with soap and water** following removal of gloves and before and after contact with the patient and equipment (alcohol gel is not effective against *Clostridioides difficile* spores) (Ref 11).
- Patients must be offered hand washing facilities or cleansing wipes and advised to maintain good hand hygiene after toilet or commode use and before eating. Fingernails should be kept clean. These measures aim to prevent relapses of the infection. Nursing employees are required to assist patient as appropriate (Ref 11).

### 2.6.4 Enhance Environmental Cleaning

- Commode or toilet should be designated for the symptomatic patient's own use.
- Commodes must be decontaminated following each patient use, using detergent and a chlorine based product (at least 1000 parts-per-million (1000 ppm) available chlorine (1 tablet to 1000ml)) or with sporicidal solution or wipes cleaning all surfaces including under the seat and armrests.
- The patient's room including bed area, bedside locker and en-suite bathroom including commodes and toilet must be thoroughly cleaned twice daily, at least six hours apart, using detergent and a chlorine based product (at least 1000 ppm available chlorine (1 tablet to 1000ml)) or with sporicidal solution or wipes. This is referred to as an enhanced clean.
- On confirmation of the patient's *Clostridioides difficile* status, IP&C request enhanced cleaning through the daily enhanced clean email to Serco.
- When positive results received on a weekend, the acute ward employees must request twice daily enhanced cleaning through GWH Serco Helpdesk immediately.
- Community employees must ensure the housekeeping supervisor is informed and housekeeping workers change their cleaning product to detergent and a chlorine based product (at least 1000 ppm available chlorine (1 tablet to 1000ml)) or with sporicidal solution or wipes.
- Waste must be disposed of in an orange (infected) waste bag in line with the Waste Policy (Ref 12).
- Bed linen should be changed at least daily while the patient remains in isolation. Bed linen must be classed as infected linen and be placed in a red soluble (alginate) bag and tied, then placed into a white polythene bag; the outer bag must be tied and tape attached around the neck of the bag which indicates "infected linen" (Ref 13).
- Any patient shared equipment used by the affected patient; for example hoists, must be cleaned after use, with detergent and a chlorine based product (at least 1000 ppm available chlorine (1 tablet to 1000ml)) or with sporicidal solution or wipes, prior to use by another patient (Ref 14).
- Rooms of infected patients must have a special or post infection clean using detergent and a chlorine based product (at least 1000 ppm available chlorine (1 tablet to 1000ml)) or with sporicidal solution or wipes, with curtain change once vacated. Ward staff are to book this clean through the Serco help desk.

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## 2.7 Information for Patients and Visitors

Patients and their visitors must be given verbal and current written information, sourced from the intranet, on infection control measures in an appropriate manner (Ref 24). The importance of adherence to this information and advice must be stressed to enable their support and engagement. Visitors who are considered to be more vulnerable to infection i.e. immunosuppressed, pregnant women and the very young should be discouraged from visiting.

## 2.8 Treatment for CDI

CDI should be managed as a diagnosis in its own right with Medical employees reviewing patients daily, assessing *Clostridioides difficile* for severity as at section 2.8.1 and monitoring frequency and severity of diarrhoea using the Bristol Stool Scale (Appendix B). The daily review includes: fluid resuscitation, electrolyte replacement and nutrition review. The treatment guidelines are set out below; these are informed by the Updated guidance on the management and treatment of *Clostridioides difficile* infection (Ref 2).

### 2.8.1 Assessing Severity of CDI

**Mild CDI** is not associated with a raised WCC; it is typically associated with < three stools of type 5–7 on the Bristol Stool Scale Chart (Appendix B) per day.

**Moderate CDI** is associated with a raised WCC that is  $<15 \times 10^9/L$ ; it is typically associated with three-five stools per day.

**Severe CDI** is associated with a raised WCC  $>15 \times 10^9/L$ , or an acute rising serum creatinine (i.e.  $>50\%$  increase above baseline), or a temperature of  $>38.5^\circ C$ , or evidence of severe colitis (abdominal or radiological signs). The number of stools may be a less reliable indicator of severity.

**Life-threatening CDI** includes hypotension, partial or complete ileus or toxic megacolon, or CT evidence of severe disease.

**Treat according to severity (Please see Instant information at the front of this document)**

**Mild and moderate CDI** – oral Metronidazole 400 mg every eight hours (tds) for 10 days. UNLESS this is a recurrence of *C. difficile* infection and patient has received a course of Metronidazole within last 28 days, then commence oral Vancomycin 125 mg every six hours (qds) for 10 days. Assess patient daily including review of severity markers, fluid/electrolytes. If symptoms worsen see guidance for severe infection treatment (Ref 2).

**Severe CDI** – Consultant Microbiologist and Gastroenterologist must be informed. Discuss with surgical team if evidence of acute abdomen/severe colitis and consider abdominal x-ray.

- Switch to **Oral** Vancomycin 125 mg every six hours (qds) for 10 days.
- If NBM give IV Metronidazole 500mg every eight hours (tds) (NB IV vancomycin should not be used to treat *C.difficile*).
- Ensure nutrition and fluid balance maintained.

**Life-threatening CDI** – Contact Gastroenterologist or Consultant Microbiologist urgently for further treatment options including:-

- High dose oral/nasogastric (NG) Vancomycin 250-500mg every six hours.
- Administration of Intracolonic Vancomycin.
- IV immunoglobulin 400 mg/kilogram (kg) one dose.
- Oral Fidaxomicin 200mg every 12 hours for 10 days. This may be indicated in patients with multiple co-morbidities who are receiving concomitant antibiotics who are more at risk

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of a relapse. This therapy needs to be discussed with and approved by the Consultant Microbiologist/*C.difficile* review team.

Such patients must be closely monitored, with specialist surgical input, and must have their blood lactate measured. If caecal dilatation > 6 centimetres (cm) on CT or plain abdominal x-ray seek surgical opinion.

If diarrhoea persists, despite 20 days treatment, but the patient is stable and the daily number of type 5–7 motions has decreased, the WCC is normal, and there is no abdominal pain or distension, the persistent diarrhoea may be due to post-infective irritable bowel syndrome.

### 2.8.2 Recurrence of CDI

- Commence oral Vancomycin 125 mg every six hours for 14 days.
- **Or** oral Fidaxomicin 200mg every 12 hours for 10 days Use of this therapy needs to be discussed with and approved by the Consultant Microbiologist/*C. difficile* review team.
- Consider Faecal Transplant see 8.8.3 and discuss with Gastroenterologist or Consultant Microbiologist.

### 2.8.3 Agents other than Metronidazole, Vancomycin or Fidaxomicin

Use of any of these agents must be after discussion with Gastroenterologist or Consultant Microbiologist.

#### Faecal transplant

This process infuses intestinal microorganisms into the intestine of patients in order to replace the bacteria which are missing in the gut of patients with CDI. GWH Faecal transplant / Human Probiotic Infusion (HPI) guidelines are available on the “Antibiotic –Which one?” section of the Trust intranet. (Ref 23)

#### Probiotics

Current national advice does not recommend the use of probiotics for the prevention of antibiotic associated diarrhoea or CDI (Ref 2). However, patients may choose to use probiotics if continual symptoms persist, to help replace the gut flora.

#### Saccharomyces boulardii

This is not available as a licensed product in the UK. It has been studied extensively but with conflicting results (Ref 2).

#### Intravenous immunoglobulin

Severe (or recurrent) CDI is considered an appropriate use of IV immunoglobulin (Ref 2).

### 2.8.4 Medication Review

- All antibiotics started inappropriately, or without sufficient evidence or which are clearly not required should be stopped. Review and document evidence for infection and state clearly in the medical notes and, where available on the “Antibiotic note” on the Electronic Prescription and Medicines Administration system (EPMA), the indication for the antibiotic.
- Use a narrow spectrum antibiotic when possible. Where a broad spectrum antibiotic has to be used empirically, review choice as soon as cultures and sensitivities become available.
- Longer courses increase the risk of *C.difficile* infection. Patients treated with less than three days of antibiotics have significantly lower incidence of CDI than those on longer courses.
- Consider Intravenous to oral switch in line with criteria set for switch on the “Antibiotic –Which one?” section of the Trust intranet (Ref 22).

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- Indicate a review or stop date on the drug chart / EPMA for antibiotic treatment at the point of prescribing.
- Review need for all antibiotics daily.
- Follow the Trust formulary and antibiotic guidelines (Refs 4,5 & 6, 27).
- All antibiotics have the potential to induce CDI. Some have been more implicated than others (see table in section 2.2).
- Restricted broad spectrum antibiotics must only be used when indicated by the patient's clinical condition, and should be reviewed on results of microbiological testing or according to the local sensitivities of causative organisms.
- Use of any restricted antibiotics must be discussed with a consultant microbiologist.
- All Consultants must be responsible for reviewing antibiotic prescriptions on all their ward rounds, stopping unnecessary prescriptions and changing those that do not comply with the guidelines, as should their juniors on their own ward rounds.
- Overlong surgical antibiotic prophylaxis is associated with diarrhoea and increased length of stay. Generally only single doses of prophylaxis are required (see Clinical Guidelines for Use of Antibiotics - Surgery (Ref 26)).
- **For GWH site:** Follow Trust antibiotic prescribing policy and guidelines (Refs 4 & 5), the paediatrician should consult with the microbiologist for advice on the treatment of a child with *Clostridioides difficile*.
- **For community in- patients:** Follow the Guidelines for Antibiotic Prescribing in the Community (Ref 6).
- There is increasing evidence that acid-suppressing medications, in particular proton pump inhibitors (PPIs) may be a risk factor for CDI. It remains possible that associations between acid suppression and risk of CDI are confounded by other CDI risk factors. However, consideration should be given to stopping/reviewing the need for PPIs in patients with or at high risk of CDI (Ref 2). A flowchart entitled "Review of Proton Pump Inhibitors for those requiring Inpatient Antibiotic Treatment" is available (Ref 25).
- Avoid anti-motility drugs; anti-diarrhoeal agents are contraindicated in this infection as they prolong excretion of the organism.
- Consider other causes for the diarrhoea e.g. drugs, lactose intolerance, overflow diarrhoea. All drugs which may cause diarrhoea and are clearly not required must be stopped e.g. laxatives.
- It must be noted that there is no evidence of a benefit of using metronidazole or vancomycin to prevent CDI (in patients receiving antibiotic therapy); indeed this approach may actually increase risk (Ref 2).

## 2.9 Monitoring of Patient with CDI

- Ward employees must document all bowel motions of symptomatic patients, recording the frequency and severity on a Stool Chart using the Bristol Stool Form Scale (Appendix B) for definitions of diarrhoea.
- Basic observations of temperature, pulse and blood pressure should be recorded at least daily (more frequently if patients condition requires).
- Blood should be taken as patient condition indicates (but at least weekly) to monitor white cell count and serum creatinine levels.
- Conduct a daily *C. difficile* ward audit using the "Reducing the risk of *Clostridioides difficile*" Care Bundle Tool (Ref 27). This will be collected or requested by the *Clostridioides difficile* Multi-disciplinary team on the weekly ward round.
- Twice weekly review (working week-Monday to Friday) of symptoms by the IP&C nurse and regular review of antibiotic prescriptions by ward pharmacist.
- Patients with CDI must be reviewed each week by a *Clostridioides difficile* Multi-disciplinary team which may include a gastroenterologist, an infection prevention and control nurse, microbiologist, antibiotic pharmacist and dietician. This review will be in the form of ward rounds for the GWH site or team discussion by telephone for community in-patients under the care of GWH; this will include any children hospitalised with CDI. The team is GWH based and will liaise as necessary

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with clinicians caring for community in-patients with CDI. All advice will be documented in the patients' records by a member of the team (this may be by the General Practitioner (GP) or senior sister from a community ward).

- The *Clostridioides difficile* Multi-disciplinary team will consider if any lapses in care have contributed to the CDI.

## 2.10 Transfers

**Patients with diarrhoea must not be transferred to other hospitals or wards unless for clinical reasons**, this must be agreed by the Consultant responsible for the patients' clinical care and in consultation with IP&C or the Consultant Microbiologist. Any decision to transfer the patient must be documented in the patient notes.

When patients with CDI are being transferred to another hospital, clinical employees must ensure that the receiving area is informed verbally and in writing of the patient's status and the IP&C team at the receiving hospital should be informed. The transport provider must also be informed; this must happen before the transfer takes place.

## 2.11 Recovered Patients

**Do not send specimens to assess whether a patient has recovered from *C.difficile* infection.** Once a patient has positive specimens for *C.difficile* these will remain positive for at least a month so there is a policy of not retesting during this period.

For in-patients in both acute and community settings the ***Clostridioides difficile* Multi-disciplinary team** will assess if a patient has recovered from their CDI. Once confirmed the IP&C team will change the alert status on Medway to indicate recovery from CDI and confirm if the patients can come out of isolation.

For patients, with a history of CDI, transferring in from another hospital, CDI recovery can be considered as a cessation of diarrhoea for at least 72 hours and the passing of a formed stool (type four or less).

## 2.12 Deceased Patients

Infection control precautions for handling deceased patients are the same as those used when the patient is alive. Faecal soiling around the deceased patient must be cleaned first with detergent and then with a chlorine containing cleaning agent or sporicidal product. Plastic body bags are not necessary. Please refer to the Isolation Policy (Ref 9) and the Standard Infection Control Precautions Policy (Ref 10).

Guidance for the writing of death certificates for patients with IP&C related causes is available on the Infection Prevention and Control page of the intranet (Ref 18).

## 2.13 Action for Periods of Increased Incidence and Outbreaks

**A Period of increased incidence (PII)** of CDI is defined as two or more new cases (occurring up to and including forty-eight hours post admission, not relapses) in a twenty-eight day period on a ward.

The following actions will be instigated by IP&C if a PII is identified on a ward:

- Inform the ward manager, Divisional Associate Medical Director, Divisional Director of Nursing, Divisional Director and Chief Nurse.
- Conduct a daily *Clostridioides difficile* ward audit using the "Reducing the risk of *Clostridioides difficile*" Care Bundle Tool (Ref 29). This will be collected or requested by the *Clostridioides difficile* Multi-disciplinary team on the weekly ward round.

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- Carry out a weekly antibiotic prescription review on the ward (using local tools); this is the responsibility of the ward pharmacist or antibiotic pharmacist.
- Clean the whole ward daily with detergent and chlorine based product (at least 1000 ppm available chlorine (1 tablet to 1000ml)) or with sporicidal solution or wipes until no further symptomatic patients are present on the ward. Emphasise that each bed space needs to be cleaned separately with separate cloths. (The patients who are isolated with *Clostridioides difficile* remain on twice daily room cleaning)
- Consultant Microbiologist to request ribotyping of all isolates from affected patients in the ward from the *Clostridioides difficile* ribotyping network (CDRN)
- The IP&C team must carry out an automatic review of ward PIIs each week.
- An incident meeting must be held. The attendees will be determined by the size and rate of growth of the PII and may include clinical representatives from the affected ward, senior divisional nursing employees, the Chief Nurse, IP&C team, Antibiotic pharmacist and Serco or Community Hotel services.

**An outbreak of *Clostridioides difficile* infection** is defined as two or more cases within the hospital:

- That have epidemiological evidence that they are linked;
- That are caused by the same strain;
- That are related in time and place over a defined period that is based on the date of onset of the first case.

**Outbreaks of CDI** must follow guidance in the Plan for Controlling Outbreaks and Ward Closure Due to Transmissible Infection Policy (Ref 19).

Both PII and Outbreaks must be reported as an incident using the Trust's Incident Notification Form.

## 2.14 Reporting

An incident notification form will be completed by the IP&C team for all cases of hospital attributed CDI. Investigations, at a level commensurate with the circumstances, will be initiated by the IP&C team and involve the clinical teams caring for the patients. This will include:

- Each individual case of hospital attributed CDI and, where appropriate, community acquired cases.
- Ward closure resulting in restricted admissions and patient movement.
- PII or outbreak; outbreaks must be reported to Public Health England (PHE). This will be reported by the IP&C team in collaboration with the Infection Control Doctor.
- *Clostridioides difficile* noted as cause of death on **part one** (a, b or c) of the death certificate.

The investigation report will be attached to the originating incident notification form by the Clinical Risk Team.

## 2.15 Surveillance and Typing

The Trust is required to report all cases of CDI in patients aged two years and over to PHE in line with the Surveillance of Healthcare Associated Infection (HCAI) Policy (Ref 20).

A case is defined as a patient with a diarrhoeal specimen that tests positive for *C.difficile* toxin, where the patient has not been diagnosed with CDI in the preceding four weeks. *C.difficile* infections will be apportioned in accordance with PHE guidelines (Ref 2):

- Positive samples taken on day one (day of admission regardless of the time of the admission), two and three of admission will be apportioned to the appropriate Trust, Clinical Commissioning Group (CCG) or GP surgery.
- Positive samples taken on day four of admission (regardless of the time of the admission) will be apportioned to the Trust.

The *C.difficile* figures relating to inpatients of all ages are monitored by IP&C who produce weekly and monthly surveillance reports.

#### Random Sampling Scheme:

The Trust is required to submit isolates to the Anaerobic Reference Laboratory in accordance with a national sampling schedule when requested. The aim is to increase the identification of *C.difficile* strains and assess their susceptibilities to antibiotics. This will be organised by Microbiology when required.

#### Ribotyping:

Ribotyping of isolates will be requested for a PII or outbreak (see section 2.13) or if appropriate for other clinical reasons. This will usually be in more severe clinical cases, in a particular outbreak situation, if there is an increase in frequency or severity of cases of CDI, if there is an increase in mortality or an increase in the recurrence rate. Typing and any subsequent fingerprinting will be arranged by IP&C and Microbiology.

### 2.16 National CDI Objectives and Sanction Regime

The Trust is required to report to the Public Health England Data Capture System each case of CDI confirmed in the GWH laboratory and those cases identified in GWH community hospitals and tested at Bristol laboratories. Each year NHS England calculates for provider organisations, an organisational objective for CDI that is, a limit in the number of cases. Potentially the Trust can be fined (a “financial sanction”) if it breaches the calculated limit of CDI cases apportioned to the Trust.

Each quarter Trust representatives meet with Commissioner Representatives to review the CDI cases and determine whether the case of CDI was linked to a lapse in the quality of care provided to the patient. The Commissioner under each commissioning contract will exercise discretion in deciding whether any individual case of CDI should count towards the number of cases on the basis of which contractual sanctions are calculated or is declared as part of the organisational objective but does not count towards the contractual sanctions (Ref 16).

## 3 Monitoring Compliance and Effectiveness of Implementation

The arrangements for monitoring compliance are outlined in the table below: -

Measurable policy objectives	Monitoring or audit method	Monitoring responsibility (individual, group or committee)	Frequency of monitoring	Reporting arrangements (committee or group the monitoring results is presented to)	What action will be taken if gaps are identified
Compliance with <i>Clostridioides difficile</i> policy	Daily completion of <i>C.difficile</i> audit tool	Ward managers and all staff involved in that care of ward patients.	Daily when a CDI case has been identified	Infection Control Committee (ICC)  Patient Quality Committee (PQC)	IP&C will alert Ward, Department or Service Managers if gaps in compliance

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	Weekly review of in-patient cases of <i>C.difficile</i>	<i>Clostridioides difficile</i> Multi-disciplinary team	Weekly	ICC PQC	are identified Divisional Leads informed of gaps for action monitoring at ICC and PQC
	Quarterly review of in-patient cases of <i>C.difficile</i>	<i>Clostridioides difficile</i> Multi-disciplinary team  Clinical Commissioning Group	Quarterly	ICC PQC	Divisional Leads informed of gaps for action monitoring at ICC and PQC
Mandatory reporting of all cases of CDI identified in GWH laboratory to Public Health England (PHE)	Checking of Trust- held figures against those produced and issued by PHE	IP&C team	Monthly	ICC	IP&C team would liaise with GWH laboratory and PHE to ensure correct reporting.

## 4 Duties and Responsibilities of Individuals and Groups

### 4.1 Chief Executive

The Chief Executive is ultimately responsible for the implementation of this document.

### 4.2 Ward Managers, Matrons and Managers for Non Clinical Services

All Ward Managers, Matrons and Managers for Non Clinical Services must ensure that employees within their area are aware of this document; able to implement the document and that any superseded documents are destroyed.

### 4.3 Document Author and Document Implementation Lead

The document Author and the document Implementation Lead are responsible for identifying the need for a change in this document as a result of becoming aware of changes in practice, changes to statutory requirements, revised professional or clinical standards and local/national directives, and resubmitting the document for approval and republication if changes are required.

### 4.4 IP&C Team

- Provide advice on appropriate placement and infection control precautions for patients with suspected or confirmed CDI.
- Inform Clinical risk management of any incidents relating to CDI e.g. Trust attributable cases, serious incidents.
- Update patient infection control alerts appropriately.

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- Produce timely feedback on surveillance of CDI, serious incidents, periods of increased incidences, root cause analysis investigations at the Infection Control Committee, and Patient Safety Committee.
- Provide education to the Infection Prevention and Control Link Workers.
- Ensure review of this policy.
- Ensure mandatory reporting to Public Health England is carried out appropriately and data is accurate.
- Inform Private Finance Initiative cleaning contractors daily of rooms requiring enhanced cleaning

#### 4.5 Antimicrobial Pharmacist and Ward Pharmacist

- Monitor the use of antimicrobial agents within the Trust and feedback on areas for improvement

#### 4.6 GWH Microbiology Employees

- Ensure that testing for CDI is available seven days per week.
- Ensure that *Clostridioides difficile* laboratory results are communicated promptly to clinical teams.
- Provide timely advice to clinicians regarding appropriate treatment.

#### 4.7 CDI Multi-disciplinary Team

- Weekly review of GWH in-patients with CDI providing management advice and guidance.
- This team is GWH based; community in-patients with CDI will be included in the review process using telephone and electronic communication.
- A summary of the weekly review will be provided by a member of the IP&C team and appropriately distributed as soon as possible.

#### 4.8 Housekeeping Responsibility

- Routinely maintain a clean environment to reduce level of environmental contamination with *Clostridioides difficile* spores.
- Provide terminal/ post infection cleaning of vacated bed spaces/isolation rooms on discharge/transfer of patients, with suspected or confirmed CDI, using products as advised by IP&C.
- Provide enhanced cleaning (chlorine cleaning twice daily) as directed by IP&C, employees to sign enhanced clean check list and ensure morning and afternoon cleans are not within six hours of each other.

#### 4.9 The Infection Control Committee

- The Infection Control Committee (ICC) is responsible for ratifying this document
- The ICC will receive reports at each meeting pertaining to the epidemiology of *C.difficile* cases attributed to the Trust and other available intelligence.
- The ICC will make recommendations and receive progress reports for any actions that are to be implemented in relation to *C.difficile*.

## 5 Further Reading, Consultation and Glossary

### 5.1 References, Further Reading and Links to Other Policies

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The following is a list of other policies, procedural documents or guidance documents (internal or external) which employees should refer to for further details:

Ref. No.	Document Title	Document Location
1	<i>Clostridioides difficile</i> infection: how to deal with the problem. Dept of Health Dec. 2008	http://www.gov.uk
2	Updated guidance on the management and treatment of <i>Clostridioides difficile</i> infection. 2013.( replaced the chapter of the same name in the document at Reference 1	http://www.gov.uk
3	<i>Clostridioides difficile</i> : guidance, data and analysis	http://www.gov.uk
4	Adults: Antibiotic Treatment Guidelines	Intranet
5	Paediatric: Antibiotic Treatment Guidelines	Intranet
6	Guidelines for Antibiotic Prescribing in the Community	Intranet
7	What will a stool sample be tested for in the GWH laboratory?	IP&C page: Intranet
8	What will a stool sample be tested for in the Bristol laboratory?	IP&C page: Intranet
9	Isolation Policy	Intranet
10	Standard Infection Control Precautions Policy	T:\Trust-wide Documents
11	Hand Hygiene and Skin Care Policy (including scrubbing gowning and gloving)	T:\Trust-wide Documents
12	Waste Policy	T:\Trust-wide Documents
13	Linen Policy	T:\Trust-wide Documents
14	Cleaning and Decontamination of Reusable Medical Devices – Including Patient Equipment Policy	T:\Trust-wide Documents
15	The Health and Social Care Act 2008 Code of Practice on the prevention and control of infections and related guidance (July 2015)	http://www.gov.uk/
16	<i>Clostridioides difficile</i> infection objectives for NHS organisations in 2015/16 and guidance on sanction implementation	<a href="http://www.england.nhs.uk">www.england.nhs.uk</a>
17	References cited in Updated guidance on the management and treatment of <i>Clostridioides difficile</i> infection. 2013 include: Apisarnthanarak et al., 2002 Am J Gastroenterol 2002;97:1769-75 J Antimicrob Chemother 2004;53:882-4 Clin Infect Dis 2011;53:994-1002.Van Nood et al., NEJM 2013	http://www.gov.uk/
18	Writing of death certificates for patients with IP&C related causes	Intranet

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Ref. No.	Document Title	Document Location
19	Plan for Controlling Outbreaks and Ward Closure Due to Transmissible Infection Policy	T:\Trust-wide Documents
20	Surveillance of Healthcare Associated Infection (HCAI) Policy	T:\Trust-wide Documents
21	Specimen Transportation Procedure	T:\Trust-wide Documents
22	IV to oral: Antibiotic Switch	Intranet
23	Faecal transplant / Human Probiotic Infusion (HPI) Guidelines	T:\Trust-wide Documents
24	<i>Clostridioides difficile</i> Patient information leaflet	Intranet
25	Review of Proton Pump Inhibitors for those requiring Inpatient Antibiotic Treatment	Intranet
26	Clinical Guidelines for Use of Antibiotics in Adults	<a href="http://gwh-intranet/media/668534/59_ppi_review_algorithm_v1.pdf">http://gwh-intranet/media/668534/59_ppi_review_algorithm_v1.pdf</a>
27	Clinical Guidelines for Use of Antibiotics - Surgery	<a href="http://intranet/media/6898/39-surgery-treatment-37-current-version-august-2017.pdf">http://intranet/media/6898/39-surgery-treatment-37-current-version-august-2017.pdf</a>
28	Reducing the Risk of <i>Clostridium difficile</i> care bundle	IP&C Intranet – Audit documentation

## 5.2 Consultation Process

The following is a list of consultees in formulating this document and the date that they approved the document:

Job Title / Department	Date Consultee Agreed Document Contents
Associate Medical Director for Unscheduled Care Division	7.10.19
SERCO Services Representatives	7.10.19
Deputy Head of Community Inpatients	7.10.19
GWH Laboratory Manager	7.10.19
Head of Facilities	7.10.19
IP&C Specialist Nurse	16.09.19
Lead Nurse Practitioner for Infection Prevention & Control IP&C)	24.09.19
Matron – Unscheduled Care	30.09.19
Members of <i>Clostridioides difficile</i> Multi-disciplinary team	28.09.19

## 6 Equality Impact Assessment

An Equality Impact Assessment (EIA) has been completed for this document and can be found at Appendix A.

## Appendix A - STAGE 1: Initial Screening For Equality Impact Assessment

At this stage, the following questions need to be considered:			
1	What is the name of the policy, strategy or project? Clostridioides Difficile Infection Policy		
2.	Briefly describe the aim of the policy, strategy, and project. What needs or duty is it designed to meet?  C. difficile causes disease when the normal bacteria in the gut are disturbed, usually by someone taking antibiotics. This allows C. difficile to grow to unusually high levels where it attacks the intestines and causes mild to severe diarrhoea. The C.difficile spore can remain dormant in the environment for months or even years.  This policy details the procedures to follow for managing and preventing cases including clinical treatment regimens and decontamination requirements.		
3.	Is there any evidence or reason to believe that the policy, strategy or project could have an adverse or negative impact on any of the nine protected characteristics (as per Appendix A)?		<b>No</b>
4.	Is there evidence or other reason to believe that anyone with one or more of the nine protected characteristics have different needs and experiences that this policy is likely to assist i.e. there might be a <i>relative</i> adverse effect on other groups?		<b>No</b>
5.	Has prior consultation taken place with organisations or groups of persons with one or more of the nine protected characteristics of which has indicated a pre-existing problem which this policy, strategy, service redesign or project is likely to address?	<b>Yes</b>	

Signed by the manager undertaking the assessment	Lisa Hocking
Date completed	18/11/19
Job Title	IP&C Corporate Lead

On completion of Stage 1 required if you have answered YES to one or more of questions 3, 4 and 5 above you need to complete a [STAGE 2 - Full Equality Impact Assessment](#)

## Equality Impact Assessment

### Are we Treating Everyone Equally?

Define the document. What is the document about? What outcomes are expected?

Consider if your document/proposal affects any persons (Patients, Employees, Carers, Visitors, Volunteers and Members) with protected characteristics? Back up your considerations by local or national data, service information, audits, complaints and compliments, Friends & Family Test results, Staff Survey, etc.

If an adverse impact is identified what can be done to change this? Are there any barriers? Focus on outcomes and improvements. Plan and create actions that will mitigate against any identified inequalities.

If the document upon assessment is identified as having a positive impact, how can this be shared to maximise the benefits universally?

### Our Vision

Working together with our partners in health and social care, we will deliver accessible, personalised and integrated services for local people whether at home, in the community or in hospital empowering people to lead independent and healthier lives.









Trust Equality and Diversity Objectives			
Better health outcomes for all	Improved patient access & experience	Empowered engaged & included staff	Inclusive leadership at all levels

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## Appendix B – Bristol Stool Form Scale

Type 1		Separate hard lumps, like nuts (hard to pass)
Type 2		Sausage-shaped but lumpy
Type 3		Like a sausage but with cracks on its surface
Type 4		Like a sausage or snake, smooth and soft
Type 5		Soft blobs with clear-cut edges (passed easily)
Type 6		Fluffy pieces, a mushy stool
Type 7		Watery, no solid pieces ENTIRELY LIQUID

## Appendix C Chlorine dosing calculations

Ratio	Volumes	Standard	Alternative volume
1:1000	1 tablet in 1 Litre of water	1,000 parts per million available chlorine	
1:10,000	10 tablets in 1 Litre of water	10,000 parts per million available chlorine	5 tablets in 500 mls of water

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Version 1.0

Printed on 12/11/2020 at 3:45 PM