Healthier Communities, Outstanding Care

Sherwood Forest Hospitals NHS Foundation Trust

CLOSTRIDIUM DIFFICILE INFECTION PREVENTION AND CONTROL POLICY

POLICY

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Associated Documents/ Information	**Date Associated Documents/ Information was reviewed**
Bowel chart/ Stool chart (adults) – available to order from Forms Management using reference FKIN030208	In date
Paediatric stool chart – available to print/ use from the intranet	Updated with this policy

CONTENTS

SUMMARY

Clostridium difficile infection (CDI) is a potentially severe or fatal infection. This policy details the practices required to reduce the risk to patients and ensure their management is appropriate, in line with current guidelines and ensures optimal care and improved outcomes. This policy describes how SFH healthcare staff can all play their part in controlling *Clostridium difficile* Infection (CDI) and reduce the risk of transmission. Over the last five years the rate of CDI has been on a decrease. This is largely due to the efforts of all staff that care for patients and those who assist persons who do. Careful application of this policy will help to maintain this progress and also to reduce the number of infections even further. It is based on the view that CDI is a disease in its own right and that cases can be prevented through good infection control practice and prudent antimicrobial prescribing.

Diarrhoea
Diarrhoea is usually the main symptom of CDI though in complicated/ life threatening cases diarrhoea may not be present (due to ileus).

Diarrhoea is defined as the passage of 3 or more loose or liquid stools within 24 hours or more frequently than is usual for the individual. The Bristol stool scale (Appendix 1) can be used to identify different stool types, diarrhoea is classed as type 5-7. All patients must have their usual bowel type/ frequency assessed on admission using the Bristol stool scale and the assessment recorded in the appropriate documentation.

Appendix 2a – SIGHT protocol

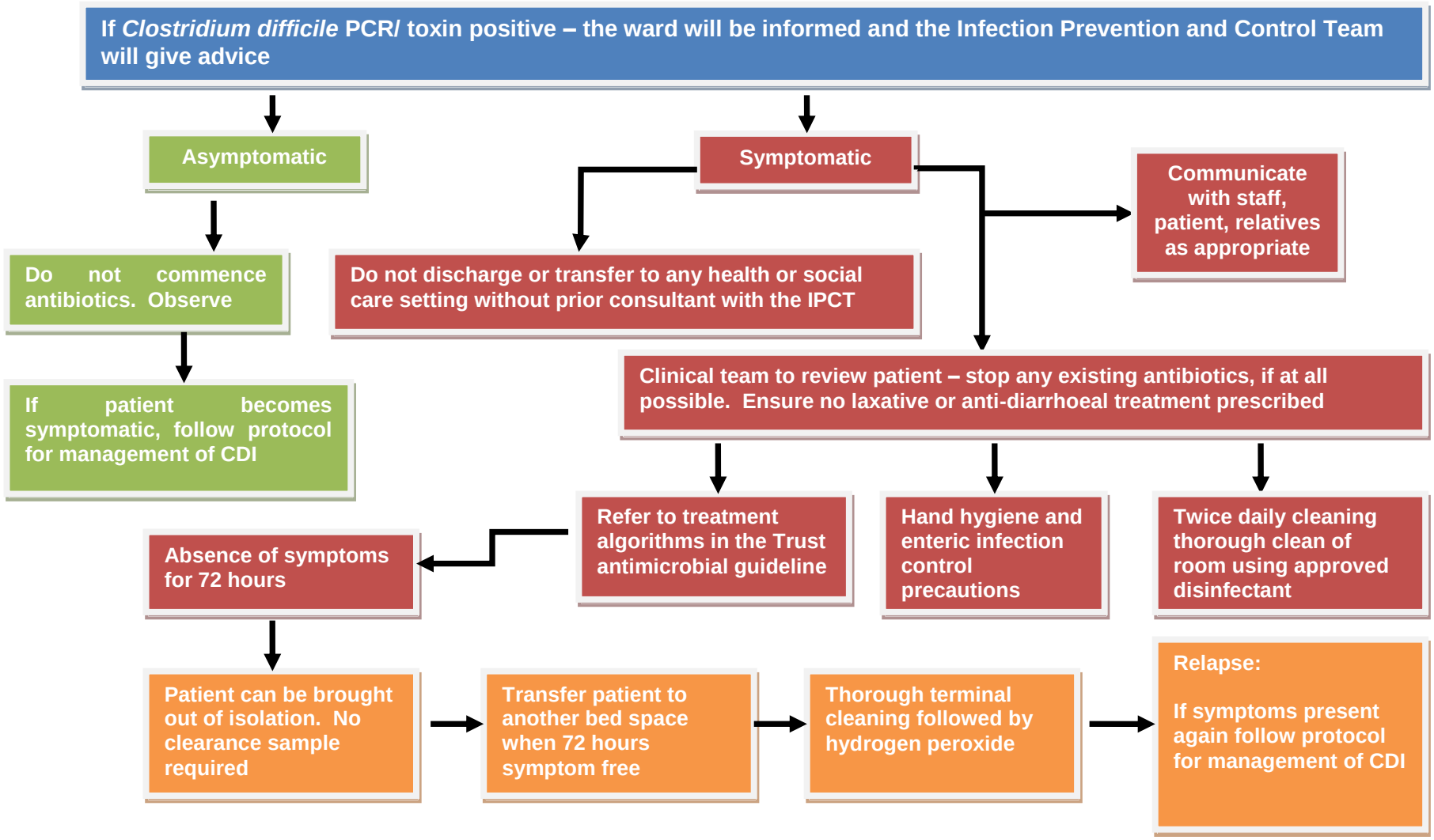
The **SIGHT** protocol must be used at the onset of diarrhoea for all patients that could potentially have infectious diarrhoea. See Box 1.

Box 1. SIGHT Protocol

S	**Suspect an infective cause when there is no other clear alternative explanation.** • Immediately review other potential causes of diarrhoea including medication, treatment of constipation and underlying illness, particularly other bowel pathology • Stop any medication that is not clearly required, especially antibiotics and drugs that may cause diarrhoea. If medication is still required consider using alternatives that are less likely to cause diarrhoea • Proton Pump Inhibitors (PPIs) must be used only when there is a clear indication • Anti-motility agents must not be newly prescribed in acute diarrhoea when infection is suspected. If patients need to continue taking anti-motility agents as part of management of other bowel conditions this must be clearly indicated in the prescription chart
I	**Isolate the patient and inform the infection prevention control team** • Inform the patient and transfer to side room within **2 hours** of the episode of diarrhoea, implement enteric isolation precautions, display appropriate signage on the side room door • The bed area occupied by the patient prior to being moved to the side room must undergo clean as stated in the 'RAG' Infection Level Cleans Level, including change of curtains • Make sure arrangements are in place for cleaning toilet/commode with Clinell® Sporcidal wipe • If en-suit not available, dedicate toilet/commode for patient use • Inform Medirest that enhanced cleaning is required • Complete incident (Datix) report if not able to isolate within 2 hours of episode of diarrhoea • Implement the *C. difficile* care plan • Keep the equipment to a minimum inside the patients room, where possible use disposable items
G	**Wear gloves and aprons appropriately** • Must be used for all contacts with the patient, their environment and equipment
H	**Wash hands with soap and water** • Hand washing must be carried out before and after each contact with the patient, their environment and equipment. • Alcohol based hand rub must be removed until the diarrhoea has resolved for 72 hours (alcohol is not effective against *C. difficile* spores)
T	**Send a stool specimen for toxin testing without delay to the microbiology laboratory.** • Complete all the required details including clinical details • Give details of any recent travel abroad

ISOLATE the patient, **DO NOT** wait for the results of the stool sample before isolating a patient if infectious diarrhoea is suspected.

Appendix 3: The management of CDI



1.0 INTRODUCTION

This policy has been developed to protect patients, staff and public from the risk of Healthcare Associated Infections (HCAIs).

For the management of CDI, see flowchart – Appendix 3, on previous page

2.0 POLICY STATEMENT

The purpose of this policy is to implement a co-ordinated approach to the identification and management of patients with CDI in line with current Department of Health (DH) requirements. This policy describes the accountability framework for implementation of the protocols that are recommended within Sherwood Forest Hospitals NHS Foundation Trust (Trust) for the prevention and control of *Clostridium difficile* (*C.* diff) carriage and infection (CDI), for ensuring the safe care and management of all patients suspected or known to have *Clostridium difficile.* This policy must be read in conjunction with other Infection Prevention and Control policies.

This clinical policy applies to:

Staff group(s)

- All clinical staff
- All non-clinical staff when they enter a clinical environment

Clinical area(s)

- All clinical environments

Patient group(s)

- All patient groups – adult, maternity and paediatric patients aged 2 and above

Exclusions

- Patients under 2 years old

3.0 DEFINITIONS AND/OR ABBREVIATIONS

3.1 Definitions

Trust: SFH	Sherwood Forest Hospitals NHS Foundation Trust
Staff:	All employees of the Trust including those managed by a third party organisation on behalf of the Trust and volunteers that work within the Trust
GDH positive	Glutamate Dehydrogenase TEST: GDH is an enzyme that is produced by ALL C. difficile species. This test is used as a screening test. If it is negative it is unlikely that the patient has CDI. If it is positive, further tests are carried out.
PCR positive	Polymerase chain reaction TEST: This test looks for the presence of the genes that encode for the production of the Clostridium difficile TOXIN. If it is positive it implies that the patient has Clostridium difficile bacteria with the capability to produce Clostridium difficile toxin.
CDI toxin positive	*Clostridium difficile* infection. This is when toxin A and B is present in the stool. A positive toxin test suggests the patient has Clostridium difficile infection and its toxin is being passed out in their stool.

Diarrhoea	The passage of 3 or more loose or liquid stools within 24 hours or more frequently than is usual for the individual. Stool defined as a type 5, 6, 7 in accordance with the Bristol Stool Chart
Symptomatic:	*C. diff* is suspected in all patients presenting with diarrhoea when there is no clear alternative clinical cause
Spore forming:	The organisms survives in a differentiated, specialised form that can be used for dispersal, and enables survival in adverse conditions
Asymptomatic carriage:	An individual has the organism in the body but has no symptoms of infection
Source isolation:	the separation of an infectious patient from other patients
Enteric precautions:	Infection prevention and control measures taken to control pathogens excreted from the bowel and potentially ingested
Surveillance:	On-going monitoring of occurrence and spread of infection
Faecal transplant:	The use of stool from a donor to rebalance gut flora
Stool sample proforma	A compliance document completed for each stool sample submitted for CDT testing
Antibiotic stewardship	The right antibiotic, for the right indication (right diagnosis), the right patient, at the right time, with the right dose and route, causing the least harm to the patient and future patients
Period of increased incidence of CDI (PII)	Two or more new cases (occurring >48 hours post admission, not relapses) in a 28-day period on a ward

3.2 Abbreviations

C diff	*Clostridium difficile*
CDI	*Clostridium difficile* infection
CDT	*Clostridium difficile* toxin
CT	Computerised tomography
DH	Department of Health
DIPC	Director of Infection Prevention and Control
EIA	Enzyme immunoassay
FMT	Faecal Microbiota Transplantation
GDH	Glutamate Dehydrogenase
GP	General Practitioner
HCAI	Healthcare Associated Infection
HPA	Health Protection Agency/Public Health England (PHE) East Midlands
IPCT	Infection Prevention and Control Team
PAS	Patient Administration System
PCR	Polymerase Chain Reaction
PII	Period of Increased Incident
PMC	Pseudomembranous colitis
PPE	Personal Protective Equipment
PPI	Proton Pump Inhibitors
RCA	Root Cause Analysis
SI	Serious Incident
WCC	White Cell Count
UK	United Kingdom

4.0 ROLES AND RESPONSIBILITIES

Each individual is responsible for applying the principles outlined within this policy and acting as a role model for outstanding infection prevention control practice.

4.1 Corporate responsibility

The Trust has a responsibility to ensure that people who use health and social care services receive safe and effective care. Effective prevention and control of infection remains a priority that must be part of everyday practice and be applied consistently by everyone. The Trust will ensure the requirements of the Code of Practice on the prevention and control of infections, under The Health and Social Care Act 2008 are in operation.

4.2 Chief Executive

The Chief Executive is ultimately responsible for ensuring that there are effective arrangements for infection prevention and control and adherence to the recommendations of this policy.

4.3 Director of Infection Prevention and Control

The Director of Infection Prevention and Control (DIPC) has Trust wide responsibility for the development of strategies and policies for the management of infection prevention and control.

4.4 Infection Prevention and Control Team

The infection prevention and control team (IPCT) will provide education and advice on the management of patients diagnosed as Clostridium difficile positive within the organisation. Participate in the national mandatory CDI surveillance programme. Support the process and operation of effective local surveillance systems to detect cases of CDI and changes in numbers of cases in each ward. They will provide CDI information leaflet for patients.

4.5 Consultants in Microbiology:

- Ensure that laboratory antimicrobial reporting procedures support local antimicrobial policy and stewardship.
- Ensure that diarrhoeal stool samples are tested and the results interpreted according to the national guidance on diagnosis of CDI.
- Ensure that stool specimens from all CDI cases are stored at -20°C for a period of one year to enable further investigations.
- Support and advise clinical staff and General Practitioners on testing, interpretation of results and treatment of CDI.

4.6 Chief Operating Officer

Chief Operating Officer will ensure that the necessary management arrangements are in place. They will monitor the application of this policy.

4.7 Matron / Head of Nursing / Service Line Director

Matron /Head of Nursing/Service Line Director are responsible for ensuring that all staff accountable to them is aware of this policy and that resources are available to enable staff and visitors to comply with the policy.

4.8 Ward/Departmental Sister/ Charge Nurse

Ward/Departmental Sister/ Charge Nurse are responsible and accountable for infection prevention and control within their area of responsibility. They will ensure that they have an Infection Prevention and Control Link Representative. They will ensure that all staff are aware of all relevant infection prevention and control measures. Contribute to and act upon Root Cause Analysis outcomes.

4.9 Antimicrobial Pharmacist
Has authority to monitor and regulate the prescription and administration of antimicrobial agents. They will work in conjunction with the Consultant Microbiologist to ensure compliance with the trust antibiotic policy.

4.10 Duty Nurse Manager
The duty nurse manager is responsible for co-ordination of patients who are admitted with infectious conditions ensuring appropriate placement e.g. isolation room to reduce the potential risk of transmission to others in accordance with the trust Isolation Policy and other appropriate clinical pathways. A patient with confirmed or suspected CDI takes high priority for side room accommodation.

4.11 Soft Services Provider
Work with infection prevention control and others to ensure the risk from the healthcare environment is minimised. Routinely maintain a clean environment. Ensure cleaning schedules complying with national cleaning standards are in place; including frequency of cleaning. Ensure R.A.G cleaning protocols in place, are implemented when required. To undertake environmental cleaning audits as per national cleaning specifications and feedback to senior managers /corporate development if audits score is below required levels and any issues that hinder the implementation of the recommendations of this policy.

4.12 All Clinical Staff
All clinical staff including medical & nursing should understand CDI is a diagnosis in its own right and that it can cause significant harm to patients. They are responsible for risk assessment of patients suspected or known to have CDI to facilitate prompt identification, treatment and management in line with this policy. They will ensure that any *Clostridium difficile* results are reviewed and actioned in a timely manner and documented; communicated to the patient and timely treatment commenced in line with Trust policy. Support best practice for antimicrobial prescribing by challenging variations from guidelines. Ensure the history of CDI is documented on the patient's GP discharge letter and any other transfer documentation.

4.13 All Staff
All staff is responsible to have knowledge of the standard principles (standard precautions) of infection prevention and control practice and to adhere to all guidance detailed in this policy. They will ensure that they are competent in the use of standard precautions. All staff are responsible for gaining lawful consent and documenting prior to implementing care and treatment. If capacity is in doubt, a two stage test should be undertaken. If the patient is found to lack capacity complete the best interests checklist and plan care in their best interests. Please see the trust's "Consent Policy" and "Mental Capacity Act Policy" for further information.

4.14 Infection Prevention and Control Link Representatives
Infection Prevention and Control Link Representatives will disseminate all relevant infection prevention and control information to staff within their own work environment. Will ensure that all staff in their work environment are aware of this policy and adhere to its statement.

5.0 APPROVAL

This policy has been taken to Infection prevention and Control committee for approval.

6.0 DOCUMENT REQUIREMENTS – POLICY

For the management of CDI, see flowchart – Appendix 3, page 5

6.1 What is CDI?

Clostridium difficile infection (CDI) is a gastrointestinal disease caused by the bacteria *Clostridium difficile*. The bacterium is Gram-positive, spore forming anaerobic bacillus. It is the most common cause of infectious bacterial diarrhoea in hospitalised patients. The disease can range in severity from symptoms of mild diarrhoea to the development of pseudomembranous colitis. The bacterium has two important abilities, one is the production of toxins A and B which can damage the cells lining the bowel; this can lead to serious and life threatening conditions. The second is the ability to form spores, which enable it to survive in the environment for lengthy periods of time.

CDI in adults is most commonly associated with, and triggered by, the acquisition of the bacteria and the current or recent use of antibiotics prescribed either to treat another condition, or given prophylactically. Notably broad spectrum penicillins, cephalosporin's, quinolones and clindamycin are associated with an increased risk of developing CDI, still any antimicrobial agent can trigger the infection (HPA 2009).

6.2 Who is at risk of getting CDI?

You can develop CDI if the bacteria enter the body through the nose and/or mouth and are swallowed. Some people carry the bacterium in their intestine (up to 5% of adults and 66% of babies) where it causes no symptoms. The bacterium is normally kept in control by the normal gut flora (good bacterial population of the intestine). People who develop CDI are usually those who've taken antibiotics, particularly the elderly and people whose immune systems are compromised.

Box 2 lists some risk factors for developing CDI:

BOX 2

Risk factors for developing CDI
➢ Patients currently exposed to antibiotic treatment or past 12 weeks, especially broad spectrum and/ or multiple courses ➢ Aged over 65 years ➢ Patient with multiple and severe underlying disease ➢ Use of enemas or laxatives ➢ Recent bowel surgery or gastrointestinal procedure ➢ Pre-existing bowel disease ➢ Nasogastric or gastrostomy tube in place ➢ Patients having chemotherapy ➢ Admission to Critical Care Unit ➢ Use of antacids/ PPI such as omeprazole (these reduce the stomach acidity) ➢ Prolonged hospital admission or re-current admissions ➢ Exposure to a case of CDI

6.3 Symptoms of CDI

Symptoms can range from mild diarrhoea to severe profuse explosive diarrhoea.

Other symptoms include:

- Abdominal pain / tenderness
- Abdominal bloating
- Fever Temperature > 38.5ºC
- Loss of appetite
- Nausea
- Foul smelling diarrhoea

In the majority of patients, the illness is mild (self-limiting) and in these cases full recovery is usual. Patients with severe diarrhoea can become seriously ill with dehydration. In some cases the colon can become ulcerated and bleeding occur (colitis) and at worse, patients may develop a severe form of the disease call pseudomembranous colitis (PMC), which causes significant damage to the lining of the large bowel; this may lead to dilated bowel or even intestinal perforation, toxic mega-colon and sepsis which can be fatal. In some cases severe CDI may occasionally be characterised by ileus with no diarrhoea.

6.4 Transmission

A patient with active CDI discharges millions of bacterial spores in their faeces; consequently the environment will be heavily contaminated with the spores, especially from patients who are incontinent of diarrhoea. The spores are most commonly found on commodes, bed pans, bed rails, bedside lockers and floors. The spores are able to survive well in the environment and are resistant to many of the commonly used disinfectants. They are able to withstand dehydration and can survive in the environment for at least six months in dust and on surfaces if not removed.

Transmission of the spores is by the faecal oral route and may occur by:

- Contaminated hands of healthcare workers
- Direct spread from patient to patient via the faecal oral route
- Indirectly through contact with contaminated equipment or environment

6.5 Diagnosis

Early diagnosis is essential for prevention and controlling CDI. A patient with diarrhoea must be reviewed by their medical team. Severe CDI is not always associated with diarrhoea therefore medics should consider CDI in patients who present with ileus, toxic megacolon or pseudomembranous colitis, other diagnostic procedures such as colonoscopy, white cell count (WCC), serum creatinine, CRP and abdominal computerised tomography (CT) scanning may be required (DH 2012).

The laboratory diagnostic test for CDI is the detection of glutamate dehydrogenase (GDH) and *C. difficile* toxin (CDT) in stool. However, the laboratory tests used for detection of CDI is not 100% sensitive therefore; a negative toxin test does not necessarily exclude the diagnosis of CDI in the presence of risk factors and clinical symptoms. Diarrhoea specimens (type 5-7) will be processed by the laboratory and the results are usually available within 12 hours.

6.6 Management and treatment of CDI in children

CDI has increasingly been identified in children. CDI causes mild as well as life-threatening disease in this population. C. difficile colonisation rates vary widely in new-borns and infants younger than 2 years (2.5-90%), reducing gradually in older children. The diagnosis of CDI recommends routine testing of symptomatic patients aged 3 years and above. The interpretation of positive results in children less than 3 years of age is problematic, and testing in this age group should be limited to samples with a paediatrician request only. In all cases, test results must be carefully evaluated against the clinical background of the patient. For treatment recommendations in paediatrics see Appendix 4. Also available via the antibiotic website
Infection Prevention and control Precautions as listed in 6.18 are to be applied

6.7 Samples

If CDI is suspected stool specimens must be obtained and sent to the microbiology laboratory without delay as soon as possible after onset of diarrhoea. Waiting to send a sample until 3 episodes of diarrhoea has occurred is not recommended, as this delay may increase the risk of C. diff transmission. Follow the **SIGHT** mnemonic.

All stool samples type 5 to 7 according to the Bristol stool scale from in-patients aged 2 years and above are routinely tested for CDT. Stool specimens from children less than 2 years of age will not be tested for CDT unless specifically requested by the paediatrician, as the toxins can be present in this age group in the absence of symptoms. Samples that are type 1 to 4 (formed) according to the Bristol stool scale will **not** be processed, even if *C. diff* is specifically requested. The stool sample must take on the shape of the container and ideally be at least ¼ filled.

All stool sample submitted for CDT testing must have a stool sample proforma completed as this allows monitoring of compliance in patients with suspected infectious diarrhoea

Repeat stool samples for CDI are not necessary within 28 days of the initial diagnosis. The laboratory will reject samples within 28 days of a positive result, unless discussed with the Consultant Microbiologist. Possible exceptions include:

- symptoms persist despite treatment, a further test may be undertaken after 28 days
- symptoms resolve and then recur which may suggest a relapse

Table 1:

Symptoms still present	No further *C. diff* toxin test is required if the patient is still symptomatic within a period of 28 days of the original positive toxin result (unless symptoms resolve and then recur)
Symptoms resolve	No further *C. diff* toxin test required for clearance
Symptoms resolved and then reappeared in 28 days	If there is a recurrence of symptoms after initial resolution within 28 days send further stool sample for toxin testing
Symptoms persist despite treatment	Further *C. diff* testing is justified at least 4 weeks after previous test
Symptoms resolve then recur	Repeat *C. diff* testing only justified diagnosing relapse of the condition. There is a risk of relapse in about 20-30% of patients
If initial test returns a negative result	If the first toxin test is negative in a patient with risk factors and/or clinical symptoms of CDI, consider sending a repeat stool sample 24 hours later, especially if no other explanation can be identified for the symptoms. Consider starting treatment.

Clearance screen	**Not required** (toxin may be present in the gut for a considerable time after the patient has become asymptomatic)
Period of increased incident/outbreak	In cases of sudden increases in the number and/or severity of cases detected in a ward or clinical area the Microbiology laboratory will send the samples to the reference laboratory for strain typing (ribotypying)

6.8 Testing and interpretation of results:

A three stage testing approach is used in the laboratory which consists of a glutamate dehydrogenase (GDH) enzyme immunoassay (EIA) test to screen samples, which is then followed by a sensitive toxin EIA test, as *C. diff* toxin enzyme immunoassays (EIA's) are not suitable as standalone tests for the diagnosis of CDI or the detection of *C. diff* (DH 2012). If a sample is positive for GDH and negative for C. diff toxin it will then be tested for PCR. If there is a strong clinical suspicion of CDI and an initial test is negative, a second sample should be submitted.

GDH antigen is an enzyme produced by all *C. diff* strains, its detection cannot distinguish between toxigenic and non-toxigenic strains.

- *C. diff* strains that produce both toxin A and B, which are detected by EIA, is reported as GDH^{+}ve/$toxin^{+}$ve. The isolate is reportable to the PHE as a positive CDI case
- GDH^{+}ve/$toxin^{-}$ve isolates will then be tested by PCR to identify whether it is:
    - Toxigenic: the *C. diff* strain carries both the toxin A and B gene (treat as the same for CDI, but not reportable)
    - Non-toxigenic: the *C. diff* strain at least a part of both the toxin A and B gene is absent (treat as non-infectious (Fluit et al 1991))

Depending on the results the following actions are implemented:

Table 2 (DH 2012):

Result of 2 test algorithm	Interpretation	Mandatory reporting
GDH positive/Toxin positive	CDI is likely to be present	Yes
GDH positive/Toxin negative/ PCR positive	*C. diff* could be present, so may have transmission potential. Patient could be potential *C. diff* excretor.	No, but may be suitable for local reporting
GDH negative/Toxin negative/ PCR negative	*C. diff* or CDI is very unlikely to be present. Patient could have other potential pathogens	No

6.9 Mandatory reporting

Since 2007 all acute NHS Trusts in England have been required to report all cases of CDI in patients over the age of 2 years. In March 2012 the HPA refined the case definition for reporting *C. diff* in accordance with the revised testing guidance which was issued by the Department of Health (DH) in 2012. Diarrhoeal samples should be tested for *C. diff* from hospital patients aged above 2 years, and all community patients aged above 65 years, and from community patients aged below 65 years when there is a clinical indication (DH 2012). Any of the following defines a CDI case in patients aged 2 years and above and must be reported to the PHE (HPA 2012, PHE 2013).

- Diarrhoea stools (Bristol Stool type 5-7) where the specimen is *C. diff* toxin positive

- Toxic megacolon or ileosotmy where the specimen is *C. diff* positive
- Pseudomembranous colitis revealed by lower gastro-intestinal endoscopy or computed tomography
- Colonic histopathology characteristic of CDI (with or without diarrhoea or toxin detection) on a specimen obtained during endoscopy or colectomy
- Faecal specimens collected post-mortem where the specimen is *C. diff* toxin positive or tissue specimens collected post-mortem where pseudomembranous colitis is revealed or colonic histopathology is characteristic of CDI

In addition to the mandatory surveillance programme the Trust also monitors the number of PCR+ve/toxin-ve diagnosed in patients of all ages > 2 years within the Trust. These numbers are recorded and reported back at the Infection Prevention and Control Committee on a quarterly basis although they are acted on contemporaneously. This surveillance helps to identify trends and highlight problems areas.

6.10 Treatment

Asymptomatic patients & patients with mild disease may not require specific C. difficile antibiotic treatment.

If treatment is required it should be managed according to the severity of infection and occurrence; clinicians need to be alert to the possibility of severe CDI without waiting for results of toxin testing. Refer to the antibiotic website for treatment options

It is important that the doctor completes a full clinical assessment to include any symptoms and the severity of the symptoms (see severity assessment Table 3). Medical staff must review any current antibiotic treatment and the requirement for the antibiotic to be continued as this may have triggered the CDI. The triggering antibiotic should be stopped wherever possible; agents with less risk of inducing CDI can be used instead if an underlying infection still requires treatment. It is important that antibiotics are used appropriately and that the more narrow-spectrum agents are prescribed where possible. The on-duty microbiologist is available for advice.

Attention should be given to stopping/reviewing the need for PPIs in patients with or at high risk of CDI. Anti-motility agents must be avoided in symptomatic CDI due to the risk of precipitating toxic megacolon by slowing the clearance of the C.difficile bacteria from the gut. Supportive care should be given, including attention to hydration, electrolytes and nutrition.

6.11 Probiotic

Some research found that while probiotics may be associated with a reduction in antibiotic associated diarrhoea, more research is needed to determine which probiotics are most effective, for which patients receiving and in relation to which particular antibiotics. Current Guidelines do not recommend the use of probiotics for the prevention of antibiotic associated diarrhoea or CDI.

6.12 Intravenous immunoglobulin

Severe (or recurrent) CDI is considered an appropriate use of IV immunoglobulin (Department of Health, 2011).

6.13 Faecal Microbiota Transplantation

Faecal Microbiota Transplantation may be offered as an option for treatment where conventional drug treatments have failed. This is NICE recommended guidance nice.org.uk/guidance/ipg485, March 2014. The procedure will be offered after consultation with consultant gastroenterologist and consultant microbiologist

6.14 Multidisciplinary clinical review

All patients with CDI are reviewed by a multidisciplinary clinical review team, consisting of a Consultant Microbiologist, Infection Prevention and Control Nurses, Antimicrobial Pharmacist. Consultant Gastroenterologist are invited where required in complex cases

6.15 Daily monitoring of patient

- Each patient should be monitored daily for frequency and severity of diarrhoea using the respective chart which must continue until the patient no longer requires isolation:
  - The Bowel / Stool Chart for adults is available to order via forms management using ref FKIN030208 (an example chart can be seen at Appendix 5)
  - The Paediatric Stool Chart, should be printed from the intranet.
- Each patient is monitored for signs of increasing severity of disease, with early referral to the Consultant Microbiologist and/or Gastroenterologist
- Each patient reviewed daily regarding fluid, electrolyte replacement and nutrition review
- All antibiotics that are clearly not required must be stopped; as should other drugs that might cause diarrhoea
- Review analgesia, opioids should be avoided as they may prolong or worsen symptoms

6.16 Assessing the severity of the infection

Guidance issued by the Department of Health (DH) in 2009, emphasises the need to assess the severity of CDI (frequency and severity), this must be done daily and documented in the patients' health records (Table 3 below).

Table 3:

Mild CDI	Is not associated with a raised WCC, it is typically associated with < 3 stools of types 5-7 on the Bristol Stool Scale per 24 hours
Moderate CDI	Is associated with a raised WCC but <15 10^9/L: it is typically associated with 3-5 stools of type 5 to 7 per 24 hours
Severe CDI	The presence of any ONE of the following features (regardless of stool frequency): • WCC > 15 10^9/L • Acute rising serum creatinine (i.e. > 50% increase above baseline) • Temperature of >38°C • Evidence of severe colitis (abdominal or radiological signs)
Life-threatening CDI	The presence of any ONE of the following features (regardless of stool frequency): • Hypotension • Partial or complete ileus • Toxic megacolon • Evidence of bowel perforation

Note: The number of stools is not a reliable indicator of severity in severe or life-threatening disease

6.17 Persistent diarrhoea

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. If all of the aforementioned criteria are met, an anti-motility i.e. 2mg prn Loperamide may be cautiously prescribed. The patient **must** be closely observed for evidence of a therapeutic response and to ensure there is no evidence of colonic dilatation (DH 2007). It is advisable to consult with the Consultant Microbiologist in such cases prior to commencing antimotilants.

6.18 Prevention and Control Measures

Managing a patient (adult and children) with suspected/ confirmed CDI

Stool Chart	"Usual" patient bowel habits must be detailed on appropriate documentation at admission. For patients with altered/ abnormal bowel movements place on a stool chart and document each episode in line with the Bristol stool scale (appendix 1) to identify trends. DO NOT use abbreviations such as B.O
Isolate	Isolate the patient in a single room with en-suite facilities, ideally within 2 hours of suspicion of infectious diarrhoea, or of a stool specimen being sent for laboratory testing. If unable to isolate, a risk assessment must be undertaken by the nurse in charge in conjunction with the duty nurse management team and IPCT. Non-compliance must be clearly documented in the patient's medical notes / nursing documentation. Controls must be put in place to protect other patients within the vicinity of the suspected case to prevent cross transmission. If en-suite facilities are unavailable ensure the patient has access to a dedicated toilet or commode Display enteric precautions signage on outside of room door. Isolation can be discontinued once the patient has been asymptomatic for 72 hours and is passing their "usual" stool
Clinical Review	Organise a clinical review of the patient if the diarrhoea is not clearly attributable to an underlying condition e.g. inflammatory colitis, overflow, or therapy e.g. laxatives to determine if it is due to CDI. Clinical assessment must include review of any antibiotic in line with the Trust antibiotic policy, including a reduction in broad-spectrum antibiotics in particular quinolones, cephalosporins and co-amoxiclav Anti-motility drugs e.g. Loperamide should be avoided due slowing the clearance of the C.difficile bacteria from the gut. If appropriate discontinue proton pump inhibiters (PPI's) and laxatives. Refer to dietician if required
Hand Hygiene	All healthcare workers must adhere to the Trust Hand Hygiene Policy and bare below the elbow principle. Hands must be washed before & after any contact with the patient or their environment using liquid soap and water. Hands must be dried thoroughly thereafter. Alcohol based hand rub must

	be removed & not used as an alternative to soap, as alcohol based rubs are not effective at removing C. diff spores (Pratt et al 2007) Hands must be decontaminated between all procedures whilst caring for the patient (as per the WHO 5 moments for hand hygiene, please see Hand Hygiene Policy) Good patient and visitor hand hygiene with soap and water must also be enforced. A patient that is unable to effectively decontaminate their hands **must** be given assistance to ensure good hand hygiene is achieved e.g. with the use of disposable hand wipes
PPE	Gloves and aprons must be worn when entering a sideroom, having direct contact with the patient or the near environment. PPE must be removed before leaving the room in the infectious waste bin, or following removal of the contents of a commode / bed pan in the sluice. PPE must be changed before assisting the patient to eat, give them oral medication or moving from a 'dirty task' to a clean task'. Removal of PPE, in this order so that un-gloved hands are not contaminated: • Take apron off first, disposed in clinical waste • Then gloves, disposed in clinical waste • Then wash hands Visitors or relatives only require PPE if they are assisting with the clinical care of the patient
Equipment	Dedicated patient equipment must be used ie disposable blood pressure cuffs & tourniquets. Bedpan holders must be used for individual patients and thoroughly cleaned between each use with a sporicidal wipe Keep clinical equipment to a minimum whilst the patient is symptomatic and the environment uncluttered in order to allow thorough and effective cleaning Clinical equipment must be cleaned as per the manufacturer's instructions or with the appropriate disinfectant e.g. hyperchlorite or peracetic acid based cleaning agent at 1000ppm available chlorine (Clinell® Sporcidal wipe) twice daily by ward staff
Cleaning	If the patient is in a main bay at the time of confirmation of Clostridium difficile, the patient bed space must receive a clean as per RAG and the bay deep cleaned using HPV. Contact the helpdesk Ext. 3005 to initiate infection cleans of isolation rooms / cohort bays The environmental cleaning undertaken by healthcare cleaners should be completed at least once a day using a sporicidal agent concentrating on frequently touched surfaces such as tables, door handles and areas heavily contaminated such as beds & floors Once the patient has been 72 hours clear of diarrhoea, they must be moved to a clean side room and the room they had occupied while being symptomatic must be decontaminated as per Trust RAG rating cleaning protocol. On discharge disposable items must be disposed of in the infectious

	waste stream and reusable items must be cleaned before being removed from the isolation room. The room must be decontaminated as per Trust RAG protocol
Laundry	Bed linen should be changed at least daily whilst the patient has diarrhoea. All hospital linen must be placed in red alginate bag and then a white plastic linen disposal bag in accordance with the Trust Policy
Waste	All waste from patients with suspected or known CDI must be disposed of as infectious waste in accordance with the Trust Waste Policy.
Documentation	If the patient is confirmed as CDI place the patient on the Infection Prevention Control Clostridium difficile care pathway. Ensure the patient's bowel actions continue to be accurately monitored using the stool chart Ensure the result is documented in the patient's medical notes Alerts will be applied to the medical notes and the Medway system

6.19 Decontamination of spillages

Faecal spillages must be cleaned by nursing staff as soon as possible using detergent and 1000ppm chlorine solution in accordance with the Trust Blood and body fluid spillage policy

6.20 Relatives and visitors

Relatives and visitors may visit a patient with CDI, unless they are currently taking systemic antibiotics themselves or have done so in the preceding 4 weeks. This is due to the increased risk to these individuals of developing CDI themselves. It is important to promote relatives' and visitors' hand hygiene. Visitors and relatives must wash their hands with soap and water before and after each patient contact. Relatives and visitors may discuss issues related to CDI and isolation care with the clinical staff. If further information is required they should be referred to the IPCT. The information provided is dependent on the patient's verbal consent.

6.21 Communication:

Good communication is vital to ensure that patients and their relatives are fully informed when a diagnosis of CDI or PCR positive is made. A patient information leaflet is available from the Infection Prevention and Control Team. The IPCT must be informed immediately of any patient(s) who develops diarrhoea of unknown origin.

6.22 Cohort nursing

The practice of cohort nursing C. diff positive patients as opposed to moving them to a side room should only be used as a last resort due to patient related risk factors or unavailability of a single room. It must only be arranged after consultation with the IPCT, and is most likely to be used in the event of an outbreak of CDI. It must be remembered that there are many reasons for a patient to have a loose stools and that only patients whose diarrhoea is confirmed as being due to C. diff can be admitted to a cohort bay. The bay must have the door closed at all times. The bay and toilet facilities of cohorted patients must also be cleaned using a paracetic acid based product in line with the R.A.G protocols. Staff entering and leaving the bay must follow the same procedures listed above. Empty beds within a C. diff cohort bay must not be used for patients who are not confirmed as being infected with C. diff unless advised by the IPCT. Patients should be taken out of the cohort bay when they have been symptom free for 72 hours and have passed a formed stool.

6.23 Visiting another department within the Trust

Visits to other departments should be kept to a minimum, when visits are clinically necessary, for investigation and treatment, the following principles must be adhered to:

- Prior to the transfer, arrangements must be made with the receiving clinical area, and they must be fully aware of the enteric precautions required
- The patient must not be transferred until the receiving environment is prepared
- Where possible patients should be seen at the end of the working session
- Patients must not be left in the waiting area with other patients
- Staff must adhere to strict infection prevention and control procedures during the investigation and/or treatment
- Wherever possible disposable equipment should be used; non-disposable equipment must be thoroughly cleaned and decontaminated after use
- The patient must be returned directly to their ward immediately following the procedure

6.24 Transfer within the Trust

The movement of a patient with CDI must be kept to an absolute minimum. Where patients need to be transferred to another ward, which is clinically indicated, the following principles must be adhered to:

- Prior to the transfer, arrangements must be made with the receiving clinical area, and they must be fully aware of the enteric precautions required
- The patient must not be transferred until the receiving environment is prepared
- The situation where a patient with CDI is transferred without the full knowledge of the receiving ward must be regarded an untoward incident and the area should generate a report via the Trust alerting system (**datix)** in accordance with the Trust's Incident Reporting Policy
- The IPCT must also be informed

6.25 Transfer outside the Trust and discharge to other health/social care providers

Do not discharge or transfer to any health or social care setting without prior consultation with the IPCT. Ensure the CDI diagnosis is recorded on the medical notes and that up to date information regarding the patient's treatment and symptoms are provided to the receiving area.

6.26 Discharge of the patient

The patient's General Practitioner (GP) must be informed that the patient has had CDI, or where PCR positive, while being an in-patient with the Trust. This is so the GP will know to avoid antibiotic treatment if possible, especially for the next 3 months following discharge, as well as being made aware of the possibility of relapse of CDI. This information must also be clearly stated in the discharge documentation.

6.27 Death and death certification

Infection control precautions for handling deceased patients are the same as those used when the patient was alive. Cadaver bags are not necessary; there is negligible risk to mortuary staff or undertakers provided that standard infection prevention and control precautions are followed.

The Trust also collects local data on patients who die as a result of their CDI. If a patient with CDI dies, the death certificate should state whether CDI was the principle cause of death (Part 1a and 1b of the certificate) or if CDI contributed in some way to death but was not the principle cause (Part 2 of the certificate). If there is any doubt about the circumstances of death when writing the certificate, the Consultant in charge of the patient's care and a Consultant Microbiologist should be consulted.

When CDI is recorded as the main cause of death on a patients' death certificate the IPCN will treat this as a serious incident (SI) and generate a report via the Trust alerting system which must be completed in accordance with the Trust's Incident Reporting Policy. All SI must be reported within 24 hours or next working day after weekends or Bank Holidays.

A RCA will be undertaken to identify any causative and contributory factors, an action plan will then be implemented at divisional level to ensure local learning informs best practice.

6.28 Period of increased incident

Period of increased incident (PII) of CDI; two or more new cases occurring >48 hours post admission, not relapses in a 28 day period on a ward. The IPCT will inform the Clinician, Ward Sister/ Charge Nurse, Matron, DIPC when a PII is identified in a particular ward area and advice on action required. Action required may include:

- Report as a clinical incident and generate, a report via the Trust alerting system must be completed in accordance with the Trust's Incident Reporting Policy
- Holding an incident meeting
- A RCA will be conducted for each positive case
- Partial closure of a bay to new admission
- Potential closure of a ward to new admission
- Conduct weekly audits of the ward environment using the IPCT audit tool. The audit will be conducted weekly until a score >90% is achieved for three consecutive weeks, and there has been no further hospital acquired cases
- Antimicrobial Pharmacist will carry out an antibiotic review on the ward.
- Audit results to be fed-back to clinical and ward staff, Matron and the IPCT
- Deep cleaning of an area or entire ward using hyperchlorite solution at 1000 ppm, followed with hydrogen peroxide for bed space areas, steam clean for bathroom/toilet areas
- Review of antimicrobial prescribing
- Review of patient equipment cleaning
- Send all samples to the reference laboratory for PCR ribotyping
- The Consultant Microbiologist will notify the Public Health for England (PHE) of all PII/outbreaks
- Movement of patients and staff should be limited to an operationally effective minimum. The movement of equipment including beds, commodes and trolleys must not occur between the affected wards and other clinical areas

6.29 Outbreak

If an outbreak is identified all actions for PII will be carried out (above list). In addition the bay or ward may be closed to new admission; the Trust will follow the guidance laid down in the Infectious outbreak/incident policy, including major outbreaks (ICP 27). Any outbreak will be treated as a clinical incident and a report will be generated via the Trust alerting system in accordance with the Trust's Incident Reporting Policy. A full outbreak investigation will be carried out by the IPCT to identify any causative and contributory factors; an action plan will then be implemented at divisional level to ensure local learning informs best practice.

Case and outbreak definitions:

- An outbreak of *C. diff* infection, two or more cases caused by the same strain related in time and place over a defined period that is based on date of onset of the first case

6.30 Closure of wards

This will be a rare occurrence and such a recommendation will only be made by the IPCT in consultation with the clinicians and managers. Such advice will depend on a number of factors i.e. the type of ward, number of patients affected, morbidity of patients affected. An outbreak control group will be convened before any such decision is made.

6.31 Root cause analysis

A RCA will be undertaken to identify any causative and contributory factors and identify any lapses in care, an action plan will then be implemented at divisional level to ensure local learning informs best practice.

All cases of where CDI is the primary cause of death or leads to surgery (colectomy) must undergo a RCA. All cases of CDI acquired >48 hours after admission to the Trust must also undergo RCA. This process will be led by the Consultant in charge of the patient's care. The RCA is to be completed within 14 days of the positive result, with the final report being presented to the appropriate clinical governance forum and the IPC RCA meeting. Severe CDI, and deaths associated with CDI, should be included as part of all mortality reviews and other case reviews on a regular basis as a means of sharing lessons learned to reduce the risk of persons acquiring CDI in the future.

7.0 MONITORING COMPLIANCE

Minimum Requirement to be Monitored (WHAT – element of compliance or effectiveness within the document will be monitored)	Responsible Individual (WHO – is going to monitor this element)	Process for Monitoring e.g. Audit (HOW – will this element be monitored (method used))	Frequency of Monitoring (WHEN – will this element be monitored (frequency/ how often))	Responsible Individual or Committee/ Group for Review of Results (WHERE – Which individual/ committee or group will this be reported to, in what format (eg verbal, formal report etc) and by who)
RCA to be conducted for all Trust acquired cases	Ward Leaders/ Clinical Governance	Maintaining RCA progress tracker	Monthly	IPCC Clinical Governance Leads
Trend Analysis of themes from all RCA's	IPCT	Review of completed RCA documents	Annually	IPCC

8.0 TRAINING AND IMPLEMENTATION

All healthcare workers will be aware of the Infection Prevention and Control Policies for the Trust by attending the mandatory, induction day, annual clinical update programmes, and formal infection prevention and control sessions and by their Ward/Department Leaders. All training sessions are outlined in the Trusts Training, Education and Development Opportunities Resource File. Infection prevention and control training on the basic principles of infection prevention and control is part of the Trust wide mandatory training for all staff and is monitored via attendance records. All clinical staff are to be aware of and have read this policy. Information about any updates will be communicated via the Divisional Management Team.

9.0 IMPACT ASSESSMENTS

- This document has been subject to an Equality Impact Assessment, see completed form at Appendix 6
- This document has been subject to an Environmental Impact Assessment, see completed form at Appendix 7

10.0 EVIDENCE BASE (Relevant Legislation/ National Guidance) AND RELATED SFHFT DOCUMENTS

Evidence Base:

- Bartlett. J. (2002). *Antibiotic – associated diarrhoea.* New England Journal of Medicine. 346: 334-339.
- Calder. P, Hall. V: (2012). *Understanding gut-immune interactions in management of acute infectious diarrhoea.* Nursing Older People. Vol 24, No 9, p. 29 – 37.
- Department of Health (2009). *Clostridium difficile* infection: How to deal with the problem. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_093220.
- Department of Health (2007). Saving Lives: reducing infection, delivering clean and safe care. High Impact Intervention No 7 - Care bundle to reduce the risk from *Clostridium difficile.* http://www.dh.gov.uk/en/Publichealth/Healthprotection/Healthcareacquiredinfection/Healthcareacquiredgeneralinformation/ThedeliveryprogrammetoreducehealthcareassociatedinfectionsHCAIincludingMRSA/index.htm.
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- Fluit. A., Wolfhagen. M., Verdon. K., Jansze., Torensma. R. Verhoef. J. (1991). *Non-toxigenic strains of Clostridium difficile lak the genes for both toxin A and toxin B.* Journal of Clinical Microbiology. Vol. 29. No. 11. P2666-2667.
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- Hickson. M. D'Souza A., Muthu N et al. (2007). *Use of probiotic Lactobacillus preparation to prevent diarrhoea associated with antibiotics: randomised double blind placebo controlled trail.* British Medical Journal. 335. 7610, 80.
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- Public Health England (May 2013) Updated guidance on the management and treatment of *Clostridium difficile.*
- Public Health England (2018) Clostridium difficile: guidance, data and analysis https://www.gov.uk/government/collections/clostridium-difficile-guidance-data-and-analysis
- Swindells. J., Brenwald. N., Reading. N., Oppenheim. B. (2010). *Evaluation of diagnostic tests for Clostridium difficile infection*. Journal of Clinical Microbiology. Vol. 48. No. 2. p. 606-608.
- Wilcox MH *et al*.(1996), Financial burden of hospital-acquired *Clostridium difficile* infection. *J Hosp Infect* ; 34(1): 23-30.
- Wilson. J. (2006). *Infection Control in Clinical Practice.* Edinburgh. Baillière Tindall.
- World Gastroenterolgy Organisation: 2011. *Practice guideline: probiotics and prebiotics.* http://www.worldgastroenterology.org/probiotics-prebiotics.
- PHE 2013National Guidelines (2013) Updated guidance on the management and treatment of Clostridium difficile infection https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/321891/Clostridium_difficile_management_and_treatment.pdf
- NUH MANAGEMENT OF C.DIFFICILE IN ADULTS 2018
- 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)

Related SFHFT Documents:

- ICP 09 Personal Protective Equipment
- ICP 31 Isolation
- ICP 40 Decontamination and Disinfection
- ICP 10 Policy regarding safe linen disposal
- ICP 04 Blood and body fluid spillage policy
- ICP 27 Infectious outbreak/incident policy including major outbreak
- ICP 17 Hand Hygiene Policy

11.0 KEYWORDS

Infection prevention control, *Clostridium difficile* infection, clostridium difficile associated diarrhoea, toxin positive,

12.0 APPENDICES

Appendix 1 – Bristol stool scale
Appendix 2a – SIGHT protocol
Appendix 2b – SIGHT poster
Appendix 3 – The management of CDI
Appendix 4 – Medicines that can produce diarrhoea
Appendix 5 – Example – Bowel Chart / Stool Chart - Adults
Appendix 6 – Equality Impact Assessment
Appendix 7 – Environment Impact Assessment

Appendix 1: Bristol Stool 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 2b: SIGHT poster

S	**SUSPECT…….** that a case may be infective where there is no clear alternative for diarrhoea
I	**ISOLATE.....** the patient and consult with the Infection Prevention and Control Team while determining the cause of the diarrhoea
G	**GLOVES AND APRON…….** for **all** contacts with the patient and their environment
H	**HAND WASHING…..** with soap and water carried out before and after each contact with the patient and the patient's environment
T	**Test……..** the stool for GDH and toxin. Send a sample immediately

Appendix 4: Medicines that can produce diarrhoea

Diarrhoea is a common adverse drug reaction (ADR) with many medicines. Antimicrobials account for 25% of drug induced diarrhoea though most cases are benign (Lee 2006). While diarrhoea has been seen with most medicines, the ones that are most commonly implicated include:

Acarbose	Antimicrobials	Biguanides
Bile salts	Colchicine	Cytotoxics
Dipyridamole	Gold preparations	Iron preparations
Laxatives	Leflunomide	Magnesium preparations
Metoclopramide	Mjisoprostol	Non-steroidal anti-inflammatory drugs
Olsalazine	Orlistat	Proton Pump Inhibitors
Ticlopidine	Metformin	

Further information on adverse effects is available from local medicines information centres or by using the 'search by section' facility at http://emc.medicines.org.uk

Appendix 5: Example – Bowel Chart / Stool Chart - Adults

(this form is available to order from forms management – reference FKIN 030208)

Name: _____

Address _____

_____

Date of Birth _____

Hospital/NHS Number _____

Sherwood Forest Hospitals NHS
NHS Foundation Trust

Bowel Chart

DATE/ TIME	STOOL TYPE	AMOUNT	SOILED Y/N?	ABNORMALITIES i.e blood, mucous	SAMPLE TAKEN YES/NO	SIGNATURE

Sample to view, do not print

For working copies, please order via our forms management system – reference FKIN 030208

- ⌘ **All patients with diarrhoea to commence on a stool chart and assess for the need for a cubicle.**
- ⌘ The stool chart is to be used when bowel motion needs to be monitored.
- ⌘ Please complete everyday, recording type of stool passed and amount.
- ⌘ Patients who have loose stools (type 5 - 7) and have had a course of antibiotics in the last 4 weeks will need a stool sample sending to microbiology, requesting Culture and Sensitivity and *Clostridium difficile*. **It is important that antibiotic history is documented on the requesting form.**

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 it's 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 with ragged edges, a mushy stool

Type 7 Watery, no solid pieces. Entirely Liquid

File In: Nursing Records
Date Issued: June 2013
Devised by Infection Control
Version 2

APPENDIX 6 – EQUALITY IMPACT ASSESSMENT FORM (EQIA)

Name of service/policy/procedure being reviewed: C-diff policy			
New or existing service/policy/procedure: Existing			
Date of Assessment: Oct 2019			
For the service/policy/procedure and its implementation answer the questions a – c below against each characteristic (if relevant consider breaking the policy or implementation down into areas)			
Protected Characteristic	**a) Using data and supporting information, what issues, needs or barriers could the protected characteristic groups' experience? For example, are there any known health inequality or access issues to consider?**	**b) What is already in place in the policy or its implementation to address any inequalities or barriers to access including under representation at clinics, screening?**	**c) Please state any barriers that still need to be addressed and any proposed actions to eliminate inequality**
The area of policy or its implementation being assessed:			
Race and Ethnicity	None	N/A	None
Gender	None	N/A	None
Age	None	N/A	None
Religion	None	N/A	None
Disability	None	N/A	None
Sexuality	None	N/A	None
Pregnancy and Maternity	None	N/A	None
Gender Reassignment	None	N/A	None
Marriage and Civil Partnership	None	N/A	None

Socio-Economic Factors (i.e. living in a poorer neighbourhood / social deprivation)	None	N/A	None

What consultation with protected characteristic groups including patient groups have you carried out?

- **Sent to all members of IPCC**

What data or information did you use in support of this EqIA?

- **National Guidance**

As far as you are aware are there any Human Rights issues be taken into account such as arising from surveys, questionnaires, comments, concerns, complaints or compliments?

- **No**

Level of impact

From the information provided above and following EQIA guidance document Guidance on how to complete an EIA (click here), please indicate the perceived level of impact:

Low Level of Impact *(Delete as appropriate)*

For high or medium levels of impact, please forward a copy of this form to the HR Secretaries for inclusion at the next Diversity and Inclusivity meeting.

Name of Responsible Person undertaking this assessment: Rosie Dixon

Signature:

Date: Oct 2019

APPENDIX 7 – ENVIRONMENTAL IMPACT ASSESSMENT

The purpose of an environmental impact assessment is to identify the environmental impact, assess the significance of the consequences and, if required, reduce and mitigate the effect by either, a) amend the policy b) implement mitigating actions.

Area of impact	Environmental Risk/Impacts to consider	Yes/No	Action Taken (where necessary)
Waste and materials	• Is the policy encouraging using more materials/supplies? • Is the policy likely to increase the waste produced? • Does the policy fail to utilise opportunities for introduction/replacement of materials that can be recycled?	No	
Soil/Land	• Is the policy likely to promote the use of substances dangerous to the land if released? (e.g. lubricants, liquid chemicals) • Does the policy fail to consider the need to provide adequate containment for these substances? (For example bunded containers, etc.)	No	
Water	• Is the policy likely to result in an increase of water usage? (estimate quantities) • Is the policy likely to result in water being polluted? (e.g. dangerous chemicals being introduced in the water) • Does the policy fail to include a mitigating procedure? (e.g. modify procedure to prevent water from being polluted; polluted water containment for adequate disposal)	No	
Air	• Is the policy likely to result in the introduction of procedures and equipment with resulting emissions to air? (For example use of a furnaces; combustion of fuels, emission or particles to the atmosphere, etc.) • Does the policy fail to include a procedure to mitigate the effects? • Does the policy fail to require compliance with the limits of emission imposed by the relevant regulations?	No	
Energy	• Does the policy result in an increase in energy consumption levels in the Trust? (estimate quantities)	No	
Nuisances	• Would the policy result in the creation of nuisances such as noise or odour (for staff, patients, visitors, neighbours and other relevant stakeholders)?	No	