Document Control

Title			
Clostridioides difficile Policy			
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Directorate Nursing		**Department** Infection Prevention & Control	
Version	**Date Issued**	**Status**	**Comment / Changes / Approval**
1.0	Mar 2007	Final	Initial version approved by Infection Prevention and Control Committee. Published on Tarkanet.
1.1	Jul 2009	Revision	Revised and updated into new template. Prepared for IPCC approval
2.0	Aug 2009	Final	Approved at IPCC with minor amendments to purpose and responsibilities sections
2.1	Jun 2010	Revision	Amendments to case record forms in Appendix D; clarifications to 6.1 about stool sample results; clarification on decontamination in 6.9
2.2	Jul 2010	Revision	Minor amendments by Corporate Affairs to document control report, filename, header and footer, formatting for document map viewing. Hyperlinks to Appendices.
2.3	Jun 2011	Revision	Changes required by Risk Management Committee on 17.3.11. Changes required by integration of NDHT and Devon Provider Services on 1.4.11 – in section 1 introduction; section 4 roles of staff. Updated to latest template standard by Corporate Affairs. Hyperlinks to documents.
2.4	Oct 2012	Revision	Revision to C.diff Monitoring Form (Appendix E).
3.0	Nov 2012	Final	Approved by Infection Prevention and Control Committee at November meeting (minute 235/12).
3.1	Dec 2012	Revision	Minor amendments by Corporate Governance to formatting for semi-automatic document control report. Update to latest Equality Impact Assessment screening form.
3.2	Aug 2013	Revision	Change to 6.4 and 6.8 to reflect new guidance Remove references to PCT Change review period post C difficile to 30 days: 6.2, 6.7, appendix D
3.3	Mar 2014	Revision	Minor revision to Appendix D. Appendices containing SEA form and Equality Assessment removed

4.0	Mar 2014	Final	Published on Bob
4.1	Nov 2017	Revision	New Trust template. Updates to contact details and documentation
4.2	August 2018	Revision	Minor amendments to body of text. Removal of IPC processes in appendices. Removal of patient information leaflet
4.3	Dec 18	Revision	Addition of indeterminate and cytotoxin descriptions to 2.2 & 5.1
5.0	March 2019	Final	Approved at IPCC meeting 29.01.19
5.1	Nov 2020	Revision	Amendments to environmental cleaning and changed to Clostridium to Clostridioides
6.0	Nov 2020	Final	Approved at IPDG meeting 24/11/2020

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Issue Date	**Review Date**	**Review Cycle**
Nov 2020	Nov 2023	Three years

Consulted with the following stakeholders:

Infection Prevention & Control Committee

Approval and Review Process

Infection Prevention & Control Committee

Local Archive Reference

G:\Infection Control

Local Path

Infection Control\IC Manual-Policies\New Templates from 2015\Cdiff

Filename

Clostridioidesdifficile Policy v6 final

Policy categories for Trust's internal website (Bob)	**Tags for Trust's internal website (Bob)**
Infection Control	

CONTENTS

1. Purpose

This document sets out Northern Devon Healthcare NHS Trust's system for control of *Clostridioides difficile* infection. It provides a robust framework to ensure a consistent approach across the whole organisation.

The purpose of this document is to inform and guide staff on the control of spread of *Clostridioides difficile* and treatment of patients vulnerable to or experiencing infection with *Clostridioides difficile*

This policy applies to all healthcare staff and is part of the Patient Safety programme.

Implementation of this policy will ensure that the Trust is working to national guidance aimed at reducing the number of cases of *Clostridioides difficile* within healthcare settings

2. Definitions

2.1. CLOSTRIDIOIDES DIFFICILE

Clostridioides difficile (*C difficile*) is an organism which is often found in the gut. It can produce a toxin and when present in large numbers causes disease. The severity of disease varies from mild diarrhoea to severe bowel problems which can be fatal. *Clostridioides difficile* disease can occur in any one over the age of 2 years, but those most at risk are those over 65 years of age, the immunocompromised and those treated with antibiotics.

2.2. C difficile Infection (CDI)

Clostridioides difficile infection is one episode of diarrhoea, defined either as a stool loose enough to take the shape of a container used to sample it or as Bristol Stool Chart types 5–7, that is not attributable to any other cause, including medicines and that occurs at the same time as a positive toxin assay (with or without a positive *Clostridioides difficile* culture) and/or endoscopic evidence of pseudomembranous colitis (PMC).

The laboratory reports two types of *C difficile* toxin assay: EIA and cytotoxin. A positive result of either assay should be used in the above definition of *Clostridioides difficile* infection. The laboratory may report an indeterminate result whilst awaiting the result of the cytotoxin assay. Patients with such results should be managed as though the result was positive until the cytotoxin result is available.

2.3. A period of increased incidence (PII) of CDI

A period of increased incidence is two or more new cases (occurring >48 hours post admission, not relapses) in a 28-day period on a ward.

2.4. An outbreak of C. difficile infection

An outbreak is two or more cases caused by the same strain related in time and place over a defined period that is based on the date of onset of the first case. The DH guidance does not define a 'defined period': any possible outbreaks by this definition will be discussed with Public Health England for their opinion.

2.5. Clostridioides *difficile* Multidisciplinary Review Team (CD MDRT)

The Trust has a CD MDRT consisting of a microbiologist, a gastroenterologist, a dietician, antibiotic pharmacist and an infection prevention and control nurse.

2.6. Infection Prevention & Control Team (IPCT)

A team, consisting of Trust nurses and doctors, who provide expert advice relating to managing and preventing infections.

2.7. Infection Prevention & Control (IPC)

Strategies and actions that seek to prevent infection from occurring, and transmitting to patients, staff and visitors. These activities relate to preventing and controlling healthcare associated infection and preventing transmission of community acquired infections in the healthcare setting.

2.8. Infection Prevention & Control Committee (IPCC)

The Trust group which reports to the Trust's Quality Assurance Committee and meets monthly.

3. Responsibilities

3.1. Role of the Chief Nurse

The Director or Nursing is responsible for:

- Acting as a second point of contact to support
- Ensuring that a replacement main contact is identified should the original author be re-deployed or leave the organisation

3.2. Role of the Infection Prevention and Control Committee

- Monitoring compliance with the policy
- Ensuring that the policy is approved after review and prior to publishing

3.3. Role of the Infection Prevention & Control Team (IPCT) & Director of Infection Prevention & Control (DIPC)

The Infection Prevention & Control Team undertake to provide education and clarification to support the utilisation of this policy prior to and following

implementation when requested to do so by the Department Manager (usually Ward or Departmental Manager in Charge of the areas to which these statements apply unless specifically stated otherwise in the text).

3.4. Role of the Named Nurse or Deputy

It is the responsibility of the named nurse or deputy to:

- Plan the individual care for each patient following this policy. Advice on management of patients (placement in the ward and treatment) must be sought from the Infection Prevention & Control Team when it is not possible or appropriate to adhere to the statements in this policy.

- All staff and visitors entering the patient's room must be aware of the precautions they must take - see section 5.9.

- Inform departments such as Theatres, X-ray, etc and staff of the *Clostridioides difficile* status of the patient when they are attending or providing services to that patient. Inform those about to receive the patient into their care such as Community Nurse, Nursing / Residential Home or other ward of the patient's *Clostridioides difficile* status and current care and treatment plans.

- Inform the Infection Prevention & Control Team immediately of any patients identified as *Clostridioides difficile* positive in transfer letters or other communication when patients are admitted direct from non-North Devon hospitals/ institutions

- In the community setting staff must liaise with GP/relevant significant others, including Infection Prevention & Control Team if required.

3.5. Role of assistant directors of operations

Assistant directors of operations will ensure that infection prevention & control objectives from the Infection Prevention & Control annual plan are incorporated into Divisional action plans. Assistant directors of operations are responsible for ensuring that systems are in place to ensure that Infection Prevention and Control policies, practices and guidance are carried out reliably within their area of responsibility; local investigation of healthcare associated infections and highlighting areas of practice or the environment which present a risk to patient safety. They are also responsible for setting a good example of infection prevention practice, and challenging poor practice.

3.6. Role of All Staff

All healthcare staff are required to adhere to the information, guidelines and procedures contained within this policy, which provide a framework for safe and best practice, aimed at preventing the spread of *Clostridioides difficile*.

The Policy applies to all groups of staff and so all staff should ensure they are familiar with it.

Any queries regarding this policy should be addressed to the Infection Prevention and Control Team.

3.7. Role of Ward manager/ nurse in charge of shift

To ensure that patients with symptomatic *Clostridioides difficile* infection are isolated in a single room and that guidance in this policy is followed. Report any problems with achieving isolation on the ward to Infection Control in normal working hours/ clinical site manager out of hours.

3.8. Role of Clinical Site Manager

To ensure that patients with symptomatic *Clostridioides difficile* infection are isolated in a single room. This may require that patients in single rooms will need to be prioritised with the help of Infection Control Northern locality - in hours and the on-call Consultant Microbiologist out of hours
If the patient cannot be accommodated on the original ward then the Clinical Site Manager will arrange for transfer to the next most suitable location for isolation to be achieved.

3.9. Role of Microbiology Staff

To ensure that testing for CDI is available 7 days per week. Ensure that *Clostridioides difficile* laboratory results are communicated promptly to clinical teams. Provide timely advice to clinicians regarding appropriate treatment.

4. Contacting the Infection Prevention and Control Team

The Infection Prevention and Control Team can be contacted in hours on 01271 322680 (ext 2680 internal at North Devon District Hospital), via bleep 011 or out of hours by contacting the on-call Medical Microbiologist via North Devon District Hospital switchboard.

5. Management of *Clostridioides difficile*

5.1. Testing for *Clostridioides difficile* toxin in stool samples

Only stools from symptomatic patients, i.e. only liquid/loose stools that take the shape of the container (Bristol Stool Chart types 5–7) should be examined. In suspected cases of 'silent' CDI, such as ileus, toxic megacolon or pseudomembranous colitis without diarrhoea, other diagnostic procedures, such as colonoscopy, white cell count (WCC), serum creatinine and abdominal CT (computerised tomography) scanning, may be required.

Stools from patients under the age of 2 years will not be tested for *C difficile*, in line with national guidance. All stool samples from patients aged over 2 years, including community patients under 65 years, will be tested for *C difficile* as per above guidance.

In accordance with national guidelines the laboratory will use a GDH test. If this is negative the sample will be reported as *C difficile* toxin negative. If the GDH test is positive an EIA toxin test will be performed. If the EIA test is positive the sample will be reported as EIA toxin positive. If the EIA test is negative the sample will be

reported as *C difficile* toxin indeterminate and the sample referred to a reference laboratory for cytotoxin testing. If the cytotoxin test is positive the sample will be reported as *C difficile* cytotoxin positive. If the cytotoxin test is negative the sample will be reported as *C difficile* toxin negative.

Results of stool samples with a positive *Clostridioides difficile* toxin test will be communicated by the microbiology department to the ward, medical team and the infection prevention & control team within 24 hours of receipt, and on the same day if received before 4pm during the week. There is a 7 day service but at weekends it is necessary to request that the sample is managed urgently and porters called to transfer specimen to lab.

Do not retest for *Clostridioides difficile* toxin (CDT) positive cases if patients are still symptomatic within a period of 28 days unless symptoms resolve and then recur and there is a need to confirm recurrent CDI. Discuss any such cases with the microbiology department to ensure stool samples are tested.

More than one test per patient may be required if the first test is negative but where there is a strong clinical suspicion of CDI. Retest a second sample 24 hours later. Further tests might be necessary if indicated by the clinical picture.
Patients with repeated negative toxin tests who have clinical findings suggestive of CDI should be discussed with a medical microbiologist.

- Children under the age of two years in whom toxigenic strains of *Clostridioides difficile* and toxins A and B may be present in the absence of symptoms should not be tested.
- Typing of *Clostridioides difficile* isolates will only be undertaken on the advice of the IPCT.
- The microbiology laboratory will comply with the testing guidance as issued by the Department of Health. Portions of all toxin positive stools will be kept for at least 1 year at -20^{o}C.

5.2. Surveillance

The IPCT will be responsible for reporting cases of *Clostridioides difficile* Infection (CDI) to the Department of Health via the HCAI Data Capture System using the definitions issued by Public Health England

The IP & C team will review all cases and identify those that require incident reporting and SEA investigations

The IP & C team will support divisional teams to undertake any investigations required.

Surveillance by the IPCT will include:

- New, relapsed or continuing cases of CDI
- Patients with severe infection
- Patients requiring surgery for CDI
- Patients dying where CDI caused or contributed to the death

The multidisciplinary clinical review team will review of all patients dying within 30 days of a diagnosis of CDI to ensure a common standard of assessment of causation or contribution to death is being applied.

The IPCT will produce a report of cases of CDI each month. This report will be tabled at the monthly Infection Prevention & Control Committee (IPCC) meeting. The report will include details of number of cases, attribution, investigation findings and any themes identified.

5.3. Period of increased incidence

The IPCT will monitor new cases of CDI and if a period of increased incidence is identified will:

1. Urgently inform the ward manager, lead nurse, lead clinician, directorate manager and antibiotic pharmacist.

2. Conduct a weekly *Clostridioides difficile* ward audit using the Department of Health's *Clostridioides difficile* High Impact Intervention (HII) tool. The audit should continue until the weekly score is >90% in three consecutive weeks and there have been no further cases of CDI acquired on the ward during that period. Feedback the audit results to the ward manager and lead nurse.

3. Carry out a weekly antibiotic review in the ward (using local tools); this is the responsibility of the antibiotic pharmacist with the microbiology team.

4. Ensure that the whole ward is cleaned using a chlorine containing agent until no further symptomatic patients are present on the ward. Emphasise that each bed space needs to be cleaned separately with separate cloths.

5. The Consultant Medical Microbiologist will arrange ribotyping of all isolates from patients in the ward.

6. Consider the need for a formal incident meeting as determined by the size and rate of growth of the PII by assessment of the situation by the DIPC and/or the duty microbiologist with the clinical director and consultants, depending on the number of cases.

7. The IPCT will carry out a review of ward PIIs each week at IPCT team meeting

5.4. 5.4 Management and treatment of *Clostridioides difficile* Infection

5.4.1. Suspect, isolate, glove up, hand washing and test (SIGHT)

When managing suspected potentially infectious diarrhoea clinicians (doctors and nurses) should apply the following mnemonic protocol (SIGHT):

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

- Patients should be monitored daily for frequency and severity of diarrhoea using the appropriate Trust documentation and stool chart which incorporates the Bristol Stool Chart.

- All antibiotics that are clearly not required should be stopped, as should other drugs, especially Proton Pump Inhibitors and H2 blockers, that might cause diarrhoea (see Appendix A). If further antibiotic treatment is indicated the choice of antibiotic must be discussed with a Consultant Microbiologist.

- Antiperistaltic agents should be avoided in acute infections.

If CDI is clinically suspected then empiric treatment, with either metronidazole or vancomycin (see 5.4.4), should be started whilst awaiting the result of stool testing. If the stool test is negative for *Clostridioidesdifficile* toxin but CDI is still clinically suspected, the treatment for CDI should be continued and a further sample sent for toxin testing as a false negative result can be obtained early in the course of the illness.

5.4.2. Patient transfer

If patients who have had CDI are transferred to another healthcare facility or discharged home it is important that the team caring for the patient is made aware of the history of recent CDI. It should be in the discharge / transfer summary.

Patients with *Clostridioides difficile* must not be transferred until they have been clear of symptoms of diarrhoea for 48 hours and have had a formed stool.

5.4.3. Patient monitoring and management

CDI should be managed as a diagnosis in its own right, with each patient reviewed daily regarding fluid resuscitation, electrolyte replacement and nutrition review. Monitor for signs of increasing severity of disease, with early referral to ITU as patients may deteriorate very rapidly.

Assess the severity of CDI each day as follows:

Mild CDI is not associated with a raised white cell count (WCC); it is typically associated with <3 stools of types 5–7 on the Bristol Stool Chart per day.

Moderate CDI is associated with a raised white cell count (WCC) that is $<15x10^9$/L; it is typically associated with 3–5 stools per day.

Moderate >5 CDI does not have the features of severe CDI but has over 5 stools per day

Severe CDI is associated with a white cell count (WCC) $>15x10^9$/L, or an acute rising serum creatinine (i.e. >50% increase above baseline), or a temperature of >38.5°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.

5.4.4 Patient Treatment

Treat according to severity (see also the treatment algorithms)

Mild, moderate and moderate >5 CDI – oral metronidazole 400 mg tds for 10–14 days.

Severe CDI – oral vancomycin 125 mg qds for 10–14 days.
In patients with co-morbidities who require other antibiotics and in severe CDI cases not responding to oral vancomycin 125 mg qds alternative treatments may be indicated. These cases should always be discussed with a consultant microbiologist. These treatments include fidaxomicin, high-dosage oral vancomycin (up to 500 mg qds, if necessary administered via a nasogastric tube) +/- intravenous metronidazole. The addition of oral rifampicin (300 mg bd) or iv immunoglobulin (400 mg/kg) may also be considered.

Life-threatening CDI – oral vancomycin up to 500 mg qds for 10–14 days via nasogastric tube or rectal installation plus iv metronidazole 500 mg tds. Such patients should be closely monitored, with specialist surgical input, and should have their blood lactate measured. Colectomy should be considered, especially if caecal dilatation is >10 cm. Colectomy is best performed before blood lactate rises >5 mmol/L, when survival is extremely poor.

If diarrhoea persists despite 20 days' treatment but the patient is stable and the daily number of type 5–7 motions has decreased, the white cell count (WCC) is normal, and there is no abdominal pain or distension, the persistent diarrhoea may be due to post-infective irritable bowel syndrome. The patient may be treated with an anti-motility agent such as loperamide 2 mg prn (instead of metronidazole or

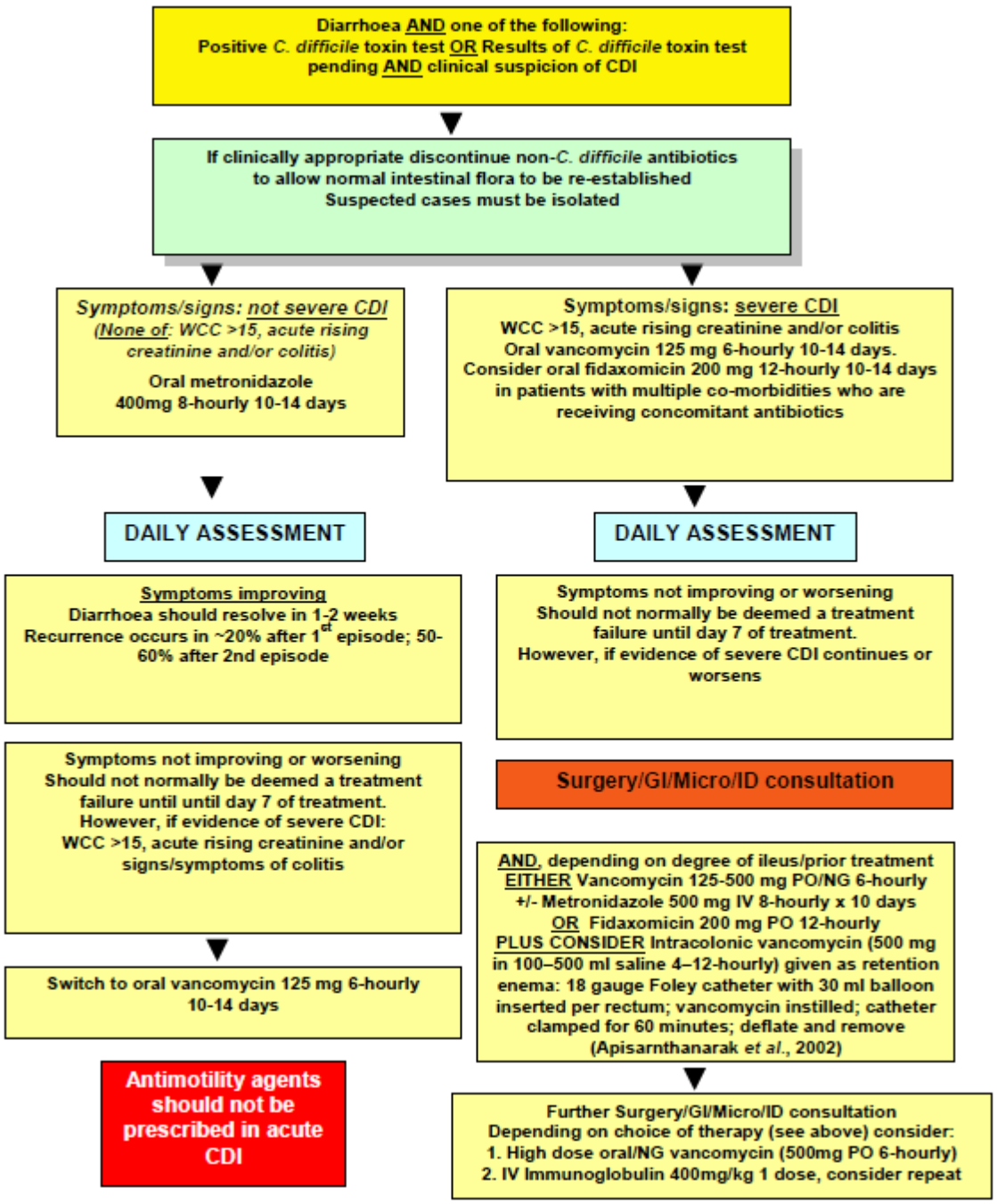
vancomycin). The patient should be closely observed for evidence of a therapeutic response and to ensure there is no evidence of colonic dilatation.

Recurrent CDI – Discuss treatment with Consultant Microbiologist. Usually use oral vancomycin 125 mg qds, oral fidaxomicin 200 mg bd is an alternative.

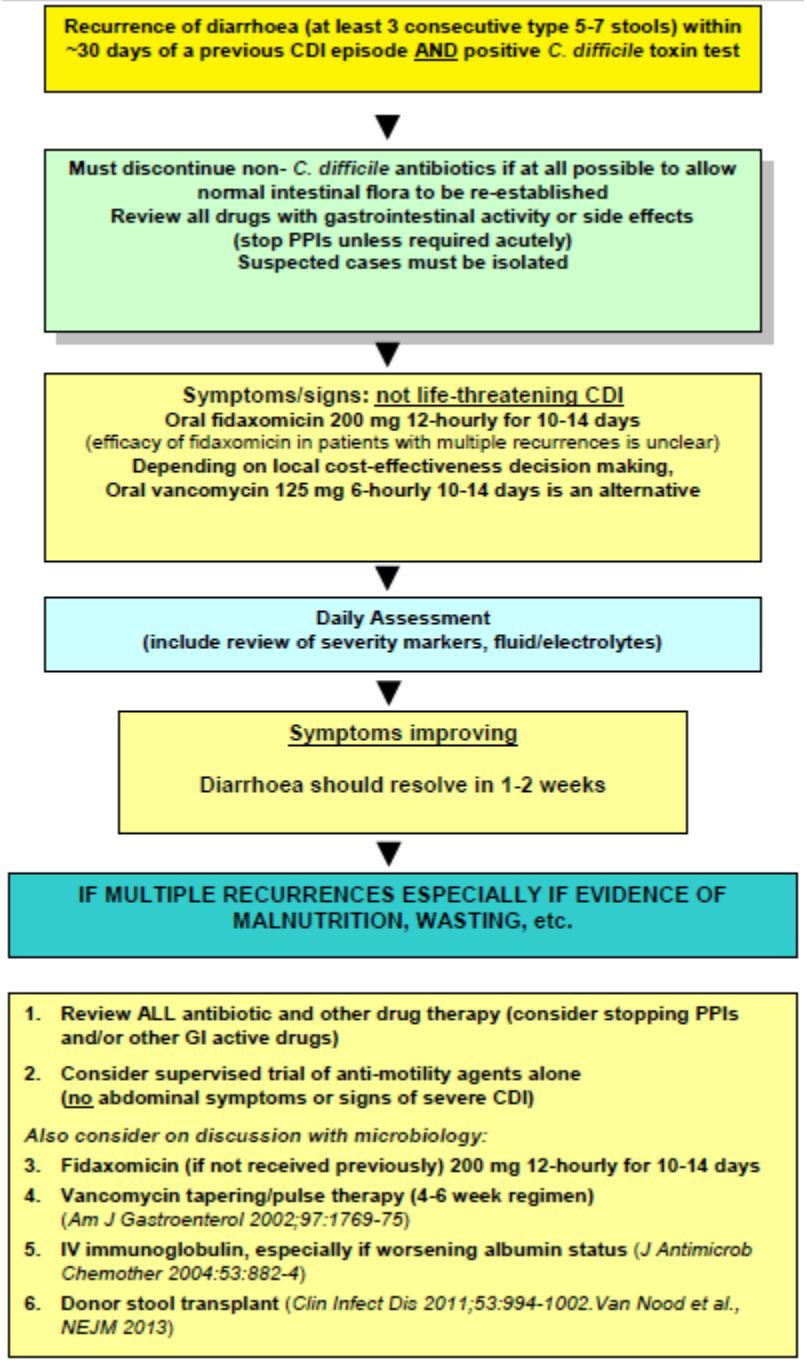
For multiple recurrences, consider the alternatives listed in the treatment algorithms

Treatment Algorithm 1.

1st episode of Clostridioides *difficile* infection



Treatment Algorithm 2
Recurrent *Clostridioides difficile* infection



5.5. Additional actions to be considered if there is high prevalence of CDI

Increase the activity of the ICT:

- Institute daily review of new and existing cases of CDI (review the clinical condition of patients and adherence to infection prevention & control precautions).
- Ensure there is coverage by an infection prevention & control link practitioner in all affected areas.

Review and maximise isolation procedures:

- Draw up a detailed operational plan for both clinical management and estates/bed/nursing support.
- The use of cohort nursing in bays may be considered, but the difficulties in maintaining cleanliness in toilets/commodes and supervising staff contact precautions may render this action ineffective, and it is not evidence-based.

Institute intensive local surveillance:

- In the event of an outbreak declared by the /IP & C Team the I P & C Team should ensure collation of information on cases every day and keep DIPC / senior management informed.

Optimise ward cleaning and disinfection:

- In the absence of easy biological indicators of the persistence of *Clostridioides difficile* spores in the environment, adhere tightly to cleaning protocols and use sporicidal agents.
- Obvious soiling with faeces (particularly on touch points) and dirty linen are potent sources for cross-infection and should be removed immediately.

Communicate diagnostic microbiology results as rapidly as possible:

- Ribotyping of representative isolates should be undertaken using one of the specialist laboratories, which can be accessed via the regional microbiologist.
- The Antibiotic Working Group will take actions to ensure that the guidance on antibiotic usage is strictly followed.

Reduce the movement of patients and staff to an operationally effective minimum:

- Movement of patients with diarrhoea both within and between wards will lead to the spread of CDI.
- Isolation wards and cohort bays should have minimal contact with uninfected ward areas.
- Great care should be given to identifying and preventing the movement of beds, commodes, trolleys and other equipment between areas.
- Compliance with guidelines should be audited.

Enhance communications with all parties and staff:

- Review communication of the situation to, and advice from, the HPU, regional microbiologist, HPA Centre for Infections (CfI) each day, as appropriate.
- Establish timely and relevant communication to all sections of the trust, including patients, and to CCG.
- Ensure that patient information leaflets are given out.
- Provide feedback on progress with CDI control to affected wards.
- Consider issuing press statements and information to the media and general public.

5.6. Death certification

Doctors have a legal duty to mention CDI on a death certificate if it was part of the sequence of events directly leading to death or contributed in some way.

Any doctor writing a certificate for a patient who has confirmed or suspected CDI which could, in any way, have contributed to that person's death should consult with a member of the Trust's *Clostridioides difficile* Multidisciplinary Review Team (CD MDRT) to ensure that *Clostridioides difficile* is recorded accurately on the certificate.

If a patient with CDI dies, the death certificate should state whether CDI was part of the sequence of events leading directly to death or whether it was the underlying cause of death. If either case applies CDI should be mentioned in Part 1 of the certificate.

If CDI was not part of the sequence of events leading directly to death but contributed in some way to it, this should be mentioned in Part 2.

5.7. *Clostridioides difficile* Multidisciplinary Review Team (CD MDRT)

The Trust's CD MDRT consists of a microbiologist, a gastroenterologist, a dietician, antibiotic pharmacist and an infection prevention and control nurse.

The CD MDRT will:

- Review all CDI patients at least weekly to ensure that the infection being treated optimally and that the patient is receiving all necessary supportive care.

Review all patients dying within 30 days of a diagnosis of CDI to ensure a common standard of assessment of causation or contribution to death is being applied.

- Act as a source of advice for clinicians who are writing death certificates on patients with CDI who have died.
- Review antibiotics prescribed for the patient within the Trust prior to the development of CDI and arrange investigation if deviation from guidance is found.

The CD MDRT can be contacted through the IPC department.

5.8. Prevention of CDI through antibiotic prescribing

The use of antibiotics is strongly associated with the development of CDI.

Acid-suppressing medications, in particular proton pump inhibitors, may be a risk factor for developing CDI. When any patient is put on or has recently been on, antibiotics strong consideration should be given to stopping PPIs where possible. This is especially important if the patient is at higher risk of CDI: age over 65 years, co-morbidities, higher risk antibiotics.

Good antibiotic prescribing will substantially reduce the risk of CDI.

The Antibiotic Working Group, a sub group of the Drugs and Therapeutics Group, produces the Trust Formulary which details empiric therapy for a range of conditions as well as detailing restricted antibiotics which can only be used after approval by a Consultant Medical Microbiologist.

Prescribers should:

- Adhere to the Trust Formulary
- Use narrow-spectrum agents for empirical treatment where appropriate.
- Avoid use of fluoroquinolones and second- and third-generation cephalosporins, especially in the elderly.
- Minimise use of clindamycin, carbapenems, co-amoxiclav and prolonged courses of amoxicillin.
- Only prescribe antibiotics when there is clinical evidence of bacterial infection.
- Evidence of infection (i.e. the reason for administering antibiotics) should be clearly documented in the clinical record.

Restricted broad-spectrum antibiotics should be used when indicated by the patient's clinical condition, and should be reviewed on results of microbiological tests.

All consultants should 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.

Antibiotics started inappropriately or without sufficient evidence should be stopped.

Antibiotics should be stopped where microbiology results do not support the diagnosis of bacterial infection in the suspected site or elsewhere.

Antibiotic prescriptions that depart from guidelines without justified clinical or microbiological indications should be changed or stopped. The traditional approach of completing a course of antibiotics once it has been started is no longer appropriate.

5.9. Prevention through isolation

- Patients with suspected potentially infectious diarrhoea (at least one episode of diarrhoea) should be moved immediately into a single room with a self-contained toilet and its own hand basin. Specimens should be sent

immediately for *Clostridioides difficile* toxin testing (see SIGHT protocol). If the room does not have its own toilet facilities then a commode should be arranged.

- The Trust stool chart (incorporating the Bristol Stool Chart see Appendix B) should be used to monitor the patient's diarrhoea. Details must be recorded on a Trust Stool Chart.
- All staff or visitors entering an isolation-room should use disposable gloves and aprons for all contact with the patient and the patient's environment, and wash their hands with soap and water before and after each patient contact (see SIGHT protocol).
- The patient should remain isolated until there has been no diarrhoea (types 5–7) on the Bristol Stool Chart) for at least 48 hours, and a formed stool has been achieved (types 1–4) or as advised by the Infection Prevention & Control Team.
- If it is not possible to isolate the patient then the situation should be discussed with the Infection Prevention & Control Team.
- On the advice of the Infection Prevention & Control Team there may be occasions when patients with diarrhoea and/or confirmed CDI may be cohorted in a bay or ward.
- Transfer and movement of patients should be reduced to an operationally effective minimum.
- Where patients need to attend departments for essential investigations, they should be 'last on the list' unless earlier investigation is clinically indicated. In advance of the transfer, the receiving area should be notified of the patient's CDI status. Arrangements should be put in place to minimise the patient's waiting time and hence contact with other patients (e.g. the patient should be called for when the department is ready for them). Routine detergent cleaning of couch / trolley and other equipment is adequate unless the patient has an episode of diarrhoea in which case Tristel Fuse and/or Tristel Jet must be used.
- Transfer to other healthcare facilities, if required must include notification of the individual's CDI status. Staff, including ambulance personnel, should adopt appropriate infection prevention & control precautions when in contact with the patient.
- All clinical waste and linen from patients with CDI, including bedding and adjacent curtains, should be considered as contaminated and should be managed as infected/fouled waste and linen.
- Infection prevention & control precautions for handling deceased patients are the same as those used when the patient is alive. Faecal soiling around the cadaver should be cleaned first with detergent and then with a chlorine-containing cleaning agent. Plastic body bags are not necessary, but may be used as part of general practice in accordance with standard precautions for all patients. There is negligible risk to mortuary staff or undertakers provided that standard infection prevention & control precautions are used.
- Staff must ensure that the diagnosis of CDI is noted on the information sent to the patients General Practitioner, and the patient should be advised to report to their GP if they experience further diarrhoea.
- If a patient still has symptoms on discharge, agencies that will provide care for the patient must be informed.

5.10. Prevention through environmental cleaning and disinfection

When a case of CDI is identified the whole ward must be cleaned with Tristel for the duration of that patient's stay, the same apples for a PII. If there is an outbreak the whole ward must be Tristel cleaned for the duration of the outbreak and for 7 days after the outbreak is declared over.

All commodes, toilets and bathroom areas of CDI patients should be cleaned after each use with Tristel Jet and/or Tristel Fuse.

On transfer, discharge or death of a patient with CDI the cleaning of the bed space, bay or ward area should be carried out using Tristel Fuse, and the curtains should be changed. The mattress requires disinfection with Tristel Fuse or Tristel Jet.

5.11. Hand hygiene in the prevention of CDI

All healthcare workers should wash their hands with soap and water before and after contact with patients with suspected or proven CDI or any other infective diarrhoea, and after contact with the patient's immediate environment or body fluids. Hands should be dried thoroughly thereafter.

All healthcare workers must use disposable gloves and aprons for any physical contact with such patients, and the patient's immediate environment and body fluids, in line with the SIGHT protocol. Gloves and aprons should be removed after use and disposed of in line with infection prevention & control directives or guidance before washing hands as above.

Alcohol handrub **must not** be used as an alternative to soap. It can be applied **after** washing to rid hands of remaining non-clostridial organisms.

5.12. Education and Training

The ward/ departmental manager is responsible for ensuring staff involved in the procedures outlined in this policy have received suitable education/ training and can demonstrate competence when dealing with cases of *Clostridioidesdifficile*.

6. Monitoring Compliance with and the Effectiveness of the Policy

Standards/ Key Performance Indicators

6.1. Key performance indicators comprise

- Reducing cases of new *Clostridioides difficile* infections
- Maintaining levels below annual limits as set by Department of Health Reporting all cases of *Clostridioides difficile* infections on the Department of Health web-based reporting system (HCAI DCS)

6.2. Process for Implementation and Monitoring Compliance and Effectiveness

After final approval, the author will arrange for a copy of the policy to be placed on the Trust's intranet. The policy will be referenced on the home page as a latest news release.

Information will also be included in the Chief Executive's Bulletin which is circulated electronically to all staff.

Line managers are responsible for ensuring this policy is implemented across their area of work.

Monitoring compliance with this policy will be the responsibility of the Lead Nurse Infection Prevention & Control. This will be undertaken by review of clinical management of all individuals with *Clostridioides difficile* Infection at least 3 times weekly by Infection Prevention & Control Nurses with a weekly review of all cases at Infection Prevention & Control Team Meeting. The Infection Prevention & Control Team weekly review will also look for indicators of Periods of Increased Incidence (PII) and take action accordingly.

7. Equality Impact Assessment

The author must include the Equality Impact Assessment Table and identify whether the policy has a positive or negative impact on any of the groups listed. The Author must make comment on how the policy makes this impact.

Table 1: Equality impact Assessment

Group	Positive Impact	Negative Impact	No Impact	Comment
Age			X	
Disability			X	
Gender			X	
Gender Reassignment			X	
Human Rights (rights to privacy, dignity, liberty and non-degrading treatment), marriage and civil partnership			X	
Pregnancy			X	
Maternity and Breastfeeding			X	
Race (ethnic origin)			X	
Religion (or belief)			X	
Sexual Orientation			X	

8. References

Clostridioides difficile infection: How to deal with the problem Department of Health, January 2009 Updated guidance on the management of *Clostridioides difficile* infection. Public Health England, May 2013. PHE gateway number 2013043

9. Associated Documentation

- Gastro-Intestinal Disease Policy
- Infection Prevention and Control Operational Policy
- Isolation Policy
- Standard Infection Control Precautions Policy

Appendix A: Medicines that can produce diarrhoea

Medicines that can produce diarrhoea

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

- acarbose;
- antimicrobials;
- biguanides;
- bile salts;
- colchicine;
- cytotoxics;
- dipyridamole;
- gold preparations;
- iron preparations;
- laxatives;
- leflunomide;
- magnesium preparations, e.g. antacids;
- metoclopramide;
- misoprostol;
- non-steroidal anti-inflammatory drugs (NSAIDS), e.g. aspirin, ibuprofen;
- olsalazine;
- orlistat;
- proton pump inhibitors; and
- ticlopidine.

Alternative diagnoses for the diarrhoea are important; therefore, careful attention should be paid to the temporal relationship between the time that the medicine is first taken and when the diarrhoea first appears.

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 B: The Bristol Stool Chart

The Bristol Stool Form Scale (Bristol Stool Chart)

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

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