The Newcastle upon Tyne Hospitals NHS Foundation Trust

Clostridium difficile Policy

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<th>5.0</th>
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1 Introduction

Healthcare Associated Infections (HCAI) are a major concern both in the acute and community setting. The cost of HCAI is huge and includes both the direct effects on the patient and their carers in terms of increased morbidity/mortality and also the financial costs to the NHS.

All NHS Trusts in England are required to report all *Clostridium difficile* (*C. difficile*) toxin positive cases, in patients over 2 years of age, to the Department of Health’s (DH) mandatory surveillance programme. A significant proportion of HCAI can be prevented by the adoption of evidence-based Infection Prevention and Control (IPC) standards. Using preventative measures that are based on reliable evidence of efficacy is a core component of an effective strategy designed to protect patients from the risk of infection.

This policy is underpinned by DH guidance ‘*Clostridium difficile* infection: How to deal with the problem’ (2008), ‘Updated guidance on the diagnosis and reporting of *Clostridium difficile*’ (2012) and ‘Updated guidance on the management and treatment of *Clostridium difficile* infection’ (2013). This takes into account a national framework for clinical governance supported by other good practice advice, such as Saving Lives (DH, 2007) and recommendations aligned with the Health and Social Care Act (2008) and Code of Practice on the Prevention and Control of Infections and related guidance (revised 2015), in order to fulfil the Codes’ requirements for addressing *Clostridium difficile* infection (CDI).

2 Scope

This policy applies to all healthcare professionals delivering care in both acute and community services within Newcastle-upon-Tyne Hospitals NHS Foundation Trust. This includes medical staff, nurses, allied health professionals, locum/agency staff and students.

3 Aim

The aim of this policy is to prevent avoidable CDI by supporting clinical staff in initiating early diagnosis, prompt isolation, and compliance with hand hygiene, personal protective equipment (PPE) and antibiotic stewardship. It also supports risk assessment for staff working in community settings.
4 **Duties (Roles and Responsibilities)**

4.1 **The Chief Executive** has overall responsibility for the implementation, monitoring and review of this policy; this responsibility is delegated to the **Nursing and Patient Services Director** as part of the Executive Team.

4.2 The **Infection Prevention and Control Committee (IPCC)**, chaired by the **Director of Infection Prevention and Control (DIPC)**, will review this policy and any new evidence base within the time frame set out in the policy, ensuring an effective and integrated approach, implementing the Trust *C. difficile* Action Plan to prevent and reduce *C. difficile*.

4.3 The **Microbiologists** are responsible for undertaking an initial assessment and where clinically indicated, providing a regular review and guidance on management of patients with known or suspected CDI, providing expert advice in the treatment and prevention of *C. difficile*.

4.4 **The Infection Prevention and Control Nursing (IPCN) Team** are responsible for providing expert advice in accordance with this policy, for supporting staff in its implementation and assisting with risk assessment where complex decisions are required.

4.5 **The IPC Healthcare Scientist** is responsible for ensuring that microbiology samples are processed in accordance with national guidance and maintains quality service provision which allows accurate diagnosis of *C. difficile*.

4.6 **The Information and Development Support Manager Patient Services** is responsible for developing and improving reporting, analysis and learning from *C. difficile* cases.

4.7 **The Antimicrobial Pharmacist** will promote the appropriate use of antimicrobial agents through education and guidelines. This individual is responsible for leading the antibiotic stewardship programme in collaboration with the **Chair of the Antimicrobial Steering Group (AMSG)**.

4.8 **Antimicrobial Lead(s)** in each Directorate leads ward based antibiotic audits (‘Take Five’) which are submitted to the Antimicrobial Steering Group every month. They will also help develop unit policies and disseminate audit results.

4.9 **Consultants, medical staff and their juniors**, are responsible for reviewing antibiotic prescribing on all ward rounds. This includes reviewing IV antibiotics at 48 hours, stopping unnecessary prescriptions and changing those that do not comply with national guidelines and local policy. Doctors should consider CDI as a diagnosis in its own right, grading each case for severity, treating accordingly, reviewing each patient daily and monitoring bowel function.

4.10 **Patient Services Coordinators (PSC)** in collaboration with clinical staff and IPC Nurses are responsible for ensuring patients are allocated beds in accordance with this policy. In any situations where safe placement cannot be achieved this will be escalated as appropriate to site IPC Doctor, DIPC and
Senior Nursing Team to ensure the most appropriate placement and to minimise the risk to the patient and others.

4.11 **On–Call Managers and Directors** are responsible, in the out-of-hours period, for providing senior and executive leadership to ensure implementation of this policy and for ensuring infection risks are fully considered and documented when complex decisions need to be made regarding capacity and patient flow.

4.12 **Directorate Managers, Clinical Directors and Matrons** are responsible for on-going development, review and monitoring of Directorate HCAI Action Plans ensuring there are effective prevention and control processes in place and that local actions to prevent *C. difficile* occurrence are initiated and completed.

4.13 It is the responsibility of **line managers and heads of department** to ensure that policies, procedures and access to education and training are made available to all staff to minimise the risk of infection and ensure clinical practice is in line with policy.

4.14 It is the responsibility of **all staff** to ensure that they understand and implement this policy and attend mandatory and other, training sessions as specified in their role.

5 **Definitions**

5.1 **C. difficile infection (CDI):** one episode of diarrhoea (Bristol Stool Chart [BSC], type 5-7 (Appendix 1) or stool loose enough to take the shape of a container used to sample it) that is not attributable to any other cause, including medicines, and that occurs at the same time as a positive toxin assay and/or endoscopic evidence of pseudomembranous colitis (PMC).

5.2 **Period of Increased Incidence (PII) of CDI:** two or more new cases (occurring >3 days post admission, not relapses) in a 28-day period on a ward.

5.3 **An outbreak of CDI:** 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 severity of CDI should be assessed using the following definitions:

5.4 **Mild CDI** is not associated with a raised WCC; it is typically associated with <3 stools of type 5-7 on the Bristol Stool Chart per day.

5.5 **Moderate CDI** is associated with a raised WCC that is <15x10^9/L; it is typically associated with 3-5 stools per day.

5.6 **Severe CDI** is associated with a WCC >15 x 10^9/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.

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

6 **Clostridium difficile (C. difficile) - general management**

6.1 **General Information**

6.1.1 *C. difficile*, a gram positive spore-forming anaerobic bacilli, can be part of normal flora of human bowels (3% in healthy adults, 16-35% in hospitalised patients). It is the leading identified cause of nosocomial (hospital-acquired) diarrhoea associated with antibiotic therapy. Symptoms range from mild/severe diarrhoea, pseudomembranous colitis to toxic megacolon and fatal colonic perforation.

6.1.2 The pathogenesis of CDI is multifactorial, involving altered bowel flora due to antibiotic use and production of toxins (Toxins A and B) by overgrowth of *C. difficile* in susceptible hosts.

6.1.3 National incidence of CDI has increased in the past decade. The proportion of hospital patients with severe, refractory or recurrent disease as well as cases in the community setting has gone up in recent years although more recent surveillance data demonstrates a decline in rates.

6.1.4 Examples of ‘at risk’ patients

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<thead>
<tr>
<th>• Older patients</th>
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<td>• Complex underlying disease</td>
<td>• Antibiotic therapy</td>
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<td>• Non-surgical gastrointestinal procedures</td>
<td>• Immuno-compromised patients</td>
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<td>• Presence of naso-gastric tube</td>
<td>• Admission to Intensive Care Unit</td>
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<td>• Anti-ulcer medications, e.g. protein pump inhibitors (PPIs)</td>
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6.1.5 Probiotics are not recommended for the prevention of CDI.

6.2 **C. difficile** Surveillance

6.2.1 All NHS Trusts in England are required to participate in the Department of Health’s mandatory CDI reporting system and to report all cases of *C. difficile* toxin (CDT) positive diarrhoea in patients over 2 years of age.

6.2.2 Diarrhoeal samples should be tested for *C. difficile* from:
- hospital patients aged >2 years, and,
- community patients, aged >65 years, and,
- community patients aged <65 years wherever clinically indicated
6.2.3 From continuous local surveillance of CDI cases, monthly reports are disseminated to all Directorates and included in the IPCC and Trust Board meetings. In addition, a report of all cases (in all age groups) is circulated to directorates, wards and units with analysis of trends and exceptional events on a quarterly basis.

6.2.4 Local surveillance also includes the number of patients where there is evidence of a lapse in care, with severe infection, the number requiring surgery and the number dying where CDI caused or contributed to the death. This information is included in the quarterly HCAI Report submitted to IPCC. A regular review of deaths within 30 days of diagnosis of CDI is conducted to ensure that a common standard of assessment of causation or contribution to death is being applied. All deaths attributed to CDI are reviewed at the Trust’s Serious Infection Meeting following Root Cause Analysis (RCA), (see Sections 6.10.3 and 6.12).

6.3 Stool Specimen Collection and Laboratory Diagnosis

6.3.1 *C. difficile* toxin testing service is available 7 days/week via the Microbiology Department, Freeman Hospital. Routine hours Monday – Friday 8am – 6pm, Saturday – Sunday 8am – 12:30pm; any out-of-hours arrangements must be made via the Microbiology on-call team. It is essential to include appropriate patient ID, clinical details and recent/current medication information (antibiotics, PPIs, laxatives or aperients) on the request.

Refer to the ‘When to Send a Stool Specimen Poster’ (Appendix 2)

6.3.2 Stool specimens should be sent for toxin testing on the 2nd episode of BSC type 5 – 7 diarrhoea of unknown cause ensuring sufficient quantity is sent for testing, i.e. fills up to 1/5th of the container as a minimum. Based on local surveillance, stool specimens are not requested routinely on the first episode of diarrhoea (for exceptions see 6.3.4).

6.3.3 Only Registered Nurses or Doctors can approve stool sample requests. If the patient is, for example symptomatic of malaena, end of life care, and further advice on specimen collection is required, advice must be sought from a Microbiologist.

6.3.4 **Do not send stool samples** on the first episode of diarrhoea unless
- clinically indicated
- the patient is admitted due to diarrhoea of unknown cause or develops diarrhoea within 3 days of admission

**Do not send a stool sample if the patient is on or has had laxatives, aperients or bowel prep in the previous 24 hours**, unless the patient is systemically unwell or there is a significant clinical indication to do so. There may be exceptions to this e.g. liver disease and those in critical
care areas. In these instances liaise with Microbiologist or the patient’s clinician for advice.

**N.B.** Following multi-disciplinary review, if a patient **who does not have a history of *C. difficile***, but is symptomatic of diarrhoea which is not deemed to be infectious in origin e.g. attributed to Nasogastric (NG) feed, isolation is not required. **This must be documented in the medical notes.**

6.3.5 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 scanning, may be required.

6.3.6 Do not retest for *C. difficile* toxin (CDT) in positive cases if patients remain symptomatic within a period of 28 days unless symptoms resolve and then recur and there is a need to confirm recurrent CDI. Discuss with appropriate medical staff and/or Microbiologist before sending further specimens.

6.3.7 If the patient remains symptomatic, seek advice from a Microbiologist; further tests might be necessary in light of clinical evidence.

6.3.8 Generally it is not advisable to test children under the age of 2 years in whom toxigenic strains of *C. difficile* and toxins A and B may be present in the absence of symptoms.

6.3.9 In the community there may be other causative organisms causing BSC type 5 – 7 stool; community staff caring for patients in the community setting should carry out an assessment and if *C. difficile* is suspected, liaise further with the patient’s GP prior to submitting a stool specimen.

6.4 **Results (see Appendices 3 and 4)**

There are 3 possible results for a *C. difficile* test:

i) **C.difficile TOXIN DETECTED (GDH +, Toxin +), this means the patient has CDI and may require treatment.**

ii) **C.difficile CARRIER (GDH +, Toxin – or equivocal, PCR +), these patients are identified as carriers of C. difficile. This means that patients are carrying C. difficile in their bowel but it is currently not producing toxin and causing CDI.** This result must be interpreted in the clinical context and also discussed with the IPC Team; if there are continuing symptoms, discuss with Microbiology, Infectious Diseases and/or Gastroenterology.

iii) **C. difficile toxin NOT DETECTED (GDH -), there is no evidence on this test that C. difficile is present.** Some patients
may need to be retested or considered for further investigation; this should be discussed with Microbiology, Infectious Diseases or Gastroenterology, particularly if the patient has markers of severe C. difficile.

6.5 Management and treatment of C. difficile

Acute Services (Refer to C. difficile Management Pathway, Appendix 5)

6.5.1 In-patient areas must commence a Diarrhoea Care Pathway when a patient has one episode of BSC type 5 – 7 stool and an infective cause cannot be excluded. On confirmation of C. difficile positive (toxin or a carrier), a C. difficile Care Pathway must be commenced and the patient and/or relative provided with a Clostridium difficile card and patient information leaflet, given to ward/department by IPC team. To ensure duty of candour, an explanation of the result must be provided to the patient and/or relative and this must be recorded in the medical notes. When explaining this information it is particularly important, where required, to work with interpreters and other communication support to provide information in a format that patients can understand.

6.5.2 Medication that may cause diarrhoea or increases risk of C. difficile e.g. PPIs, must be reviewed by medical staff and those medications not required should be stopped where appropriate.

6.5.3 Positive C. difficile results will be acted upon by IPC Team, who will liaise with the appropriate clinical teams looking after the patient.

6.5.4 The IPC Team will add a C. difficile alert to eRecord to identify the patient is C. difficile positive (toxin or a carrier).

6.5.5 The clinical assessment of the patient and appropriate need for senior medical input, surgical review or critical care input should be guided by the actions required on the Patient’s Observation Chart and National Early Warning Score (NEWS).

6.5.6 Where a case of CDI is confirmed 3 days after admission, a C. difficile audit will be completed weekly for 2 weeks by an IPCN on the ward where the case is attributed. Real-time feedback will be provided to the nurse-in-charge of the clinical area and where issues are identified, an action plan will be completed to address these. The audit data will be included in the quarterly HCAI Report.

Community Services

6.5.7 Positive C. difficile results from patients in the community are telephoned to the patient’s GP practice by the Microbiology Laboratory; they are also sent electronically directly from the laboratory to the GP.
6.5.8 It is the responsibility of the GP to review current medication and prescribe the appropriate treatment seeking Microbiology or IPCN advice if appropriate.

6.5.9 Patients in community settings who are symptomatic should be individually assessed by staff responsible for their care, and when required, advice sought from a Microbiologist by the GP.

6.5.10 Community staff involved in patient care where the patient is *C. difficile* positive (toxin or carrier), and is symptomatic of diarrhoea, must ensure that any disposable waste contaminated with infected faecal material is disposed of in accordance with Clinical Waste in Patients Homes (Appendix 6) and District Nursing Service Process for Collection of Clinical Waste from Patient Home (Appendix 7). This is arranged using the ‘Request for Collection of Clinical Waste from a Patient’s Home’ form (Appendix 8); this would remain the case until the patient becomes asymptomatic.

6.5.11 If a symptomatic patient is receiving clinical care from a member of NuTH community staff and becomes acutely unwell requiring admission to an acute hospital, it is the responsibility of that member of staff to notify the receiving facility of the patient’s *C. difficile* status in a timely manner to ensure appropriate management.

**Treatment according to severity**

Antimicrobial treatment should be prescribed based on the severity of CDI; please refer to the Trust’s [Guide to Antimicrobial Therapy](#) for reference.

6.5.12 **Mild and moderate CDI** – oral metronidazole 400-500 mg tds for 10-14 days.

6.5.13 **Severe CDI** – oral vancomycin 125 mg qds for 10-14 days. In severe CDI cases not responding to oral vancomycin 125 mg qds, high-dosage oral vancomycin (up to 500 mg qds, if necessary administered via a nasogastric tube) +/- intravenous (IV) metronidazole 500 mg tds is recommended. All cases of severe *C. difficile* must have a clinical review by Gastroenterology or Infectious Diseases and discussion with Microbiology. The addition of oral rifampicin (300 mg bd) or IV immunoglobulin (400 mg/kg) may also be considered in discussion with Consultant Microbiologist or Gastroenterology or Infectious Diseases.

6.5.14 **Severe disease >65yrs of age or neutropaenic** – oral Fidaxomicin 200mg bd for 10-14 days after discussion with Microbiologist, Gastroenterology or Infectious Diseases.
6.5.15 **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 (colorectal team) and / or critical care referral, and should have their blood lactate monitored. Colectomy should be considered, especially if caecal dilatation is >10 cm. Colectomy is best performed before blood lactate rises >5 mmol/L, when chances of survival is extremely poor. All cases of life threatening *C. difficile* must have a clinical review by Gastroenterology or Infectious Diseases and discussed with Microbiology.

6.5.16 If diarrhoea persists despite 20 days’ treatment but the patient is stable and the daily number of type 5-7 stools 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. The patient should be discussed with a Microbiologist in the first instance and may require review and further investigation through Gastroenterology.

6.5.17 **For non-life threatening first recurrence**, Use Fidaxomicin 200mg bd for 10-14 days only after discussion with Microbiology.

6.5.18 **For subsequent recurrences**, discuss with Microbiology. All patients must have a clinical review by Gastroenterology or infectious diseases.

6.5.19 If following treatment the patient’s symptoms persist, the medical team/GP should seek advice from a Microbiologist, referral to Gastroenterology should be considered. If the patient has a relapse of symptoms, the clinician must liaise with Infectious Diseases to consider faecal transplantation as a treatment option, refer to the Trust's guidance on Faecal Microbiota Transplantation.

### 6.6 Prevention of *C. difficile* through antibiotic prescribing

Antimicrobial treatment regimens may change, therefore in conjunction with this policy, please refer to the Trust’s Guide to Antimicrobial Therapy. All prescribers have a responsibility to ensure the following;

- Individual prescribers are responsible for any prescription they sign
- Prescribers must follow the Start Smart then Focus principles
- If the prescriber is uncertain as to what to prescribe and there are no specific Trust-wide or departmental guidelines they must seek the advice of a senior colleague, microbiologist or infectious disease physician. Advice can also be obtained from the ward and antimicrobial pharmacist when appropriate
- If a patient develops *C. difficile* infection (CDI), it is the responsibility of the consultant in charge of the patient to ensure a review of recent antimicrobial
treatments (last 3 months) and ensure that this is recorded in the Root Cause Analysis (RCA). This can be done by a specialty trainee under supervision

6.6.1 Use narrow-spectrum agents for empirical treatment where appropriate.

6.6.2 Carefully consider the use of clindamycin and second- and third-generation cephalosporins especially in the elderly.

6.6.3 Minimise use of fluoroquinolones, carbapenems and prolonged courses of aminopenicillins.

6.6.4 Restricted broad-spectrum antibiotics should be used only when indicated by the patient’s clinical condition, and must be reviewed on results of microbiological testing or according to the local sensitivities of causative organisms.

6.6.5 Refer to Trust’s Antibiotic Stop/Review Date and Indication Policy. When in doubt seek advice from site Microbiologists.

6.6.6 Education in prudent antibiotic use is undertaken by medical and nursing staff at induction and annual mandatory training via the Trust eLearning programme.

6.6.7 Ward-based audit of antibiotic usage and compliance are undertaken in accordance with the Antibiotic Stop/Review and Indication Policy.

6.7 Prevention of transmission of C. difficile through isolation

6.7.1 A patient with diarrhoea must be isolated (single cubicle with designated toilet facilities) on the first episode of BSC type 5-7 diarrhoea if infective diarrhoea suspected, in line with the Trust’s Standard Precautions, Isolation, Waste Management and Procedures and the Used Laundry Management policies.

6.7.2 Symptomatic patients should not be transferred/discharged to other areas unless in exceptional circumstances and following risk assessment in conjunction with IPC Team. A single room must be sought.

6.7.3 If isolation in a single room is not possible, the staff caring for the patient must contact the PSC to source a cubicle; advice from IPC team to be sought as required. Where necessary, and in exceptional circumstances, the IPC Team may consider cohort nursing in a bay or ward following discussion with clinical staff.

6.7.4 The patient must remain isolated in accordance with the Standard Precautions, Isolation, Waste Management and Procedures and the Used Laundry Management policies until asymptomatic of BSC type 5–7 stools for at least 48 hours.
6.8 Prevention of transmission of *C. difficile* through effective hand hygiene and Personal Protective Equipment (PPE)

**Acute Services**

6.8.1 All staff must use disposable gloves and aprons for all contact with the patient/patient’s environment, and wash their hands with liquid soap and water as per Hand Hygiene Policy.

**Alcohol based hand rub must not be used as an alternative to hand washing as it is not effective against *C. difficile* spores. It can be applied after hand washing to rid hands of remaining non-clostridial organisms.**

6.8.2 Visitors need only wear gloves and an apron if directly involved in patient care; hands must be washed with liquid soap and water after each patient contact.

6.8.3 Patients must be encouraged to wash their hands or have assistance with hand hygiene before meals and after visiting the toilet.

**Community Services**

6.8.4 All staff must use disposable gloves and aprons for all contact with the patient/patient’s environment, and wash their hands with liquid soap and water as per Hand Hygiene policy.

6.8.5 In a patient’s home where hand washing facilities are unavailable or inadequate, a moist hand cleansing wipe can be used however the member of staff must wash hands with soap and water at the first available opportunity.

6.8.6 Where it is known that relatives are involved in delivering care, they should be advised of the importance of carrying out effective hand hygiene.

6.9 Prevention of *C. difficile* through environmental cleaning and disinfection

Refer to Trust Decontamination of the Patient Environment (including Terminal and Deep Cleaning).

**Acute Services**

6.9.1 Environmental cleaning of isolation rooms or bed spaces of *C. difficile* positive patients (toxin or a carrier) must be carried out at least twice daily using combined detergent/chlorine releasing agent (1,000 ppm available chlorine – **contact time 10 minutes**).
6.9.2 All commodes must be cleaned after each use with a sporicidal product e.g. combined detergent/chlorine releasing agent (1,000 ppm available chlorine).

6.9.3 The bed space must be terminally cleaned (including the curtains changed) using a combined detergent/chlorine releasing agent (1,000 ppm available chlorine) once a patient is asymptomatic for >48 hours and isolation ceases, after discharge, transfer or death.

**Freeman site only** – following a risk assessment and as an additional measure, Hydrogen Peroxide Vapour (HPV) is available and should be routinely deployed as part of the terminal cleaning process for all cases of known or suspected *C. difficile*-associated diarrhoea.

6.9.4 The ward environment should be clutter free and Trust policy Decontamination of Healthcare Equipment following Patient Use Prior to Service and/or Repair and the Cleaning and Disinfection Procedure adhered to.

**Community Services**

6.9.5 Community staff can offer advice to patients/carers/relatives on environmental cleanliness in the home setting. Further advice to be sought from the IPC Nurses when required.

**NB:** Cleaning agents containing chlorine must not be used on patient’s furniture or carpets. Any faecal soiling on these items must be cleaned using warm soapy water and disposable cloths.

**6.10 Root Cause Analysis (RCA), Serious Infection Review Meeting (SIRM) and Appeals**

6.10.1 An RCA is completed on all patients who are confirmed *C. difficile* toxin positive (see Appendix 9); a Datix incident form is submitted for all cases occurring more than 3 days after admission to the Trust. The appropriate RCA is to be completed by the relevant clinical staff involved in the patient’s care with support from the IPC Nurse. (See Appendix 10 - ‘In-patient, post-3 days’ and ‘GP, pre-3 days’ RCA Toolkits).

6.10.2 When *C. difficile* is identified on Part 1 or 2 of a death certificate, a Datix incident form and a ‘*C. difficile* - death certificate’ form (see Appendix 10) must be completed by the clinician responsible for the patient’s care. (See 6.12).

6.10.3 RCAs are discussed at the Trust Serious Infection Review Meeting (SIRM) at the discretion of the DIPC, site IPC Doctor and Matron IPC; cases will be reviewed within 4 weeks of occurrence. All cases where *C. difficile* is recorded on the patient’s death certificate will be required to attend SIRM.
6.10.4 If following review, there are no lapses in care and the occurrence of CDI is deemed to be unavoidable, the case will be submitted to the Gateshead and North of Tyne HCAI Reduction Partnership Appeals Panel by the DIPC and IPC Team.

6.11 Management of PII/Outbreak

6.11.1 IPC Team must inform the Clinical Director, Directorate Manager, Matron, Sister or Charge Nurse of a PII or outbreak.

6.11.2 An incident meeting should be held as determined by the size and rate of growth of the PII following assessment of the situation by the Site Microbiologist and/or the DIPC with the relevant Clinical Director and consultants, depending on the number of cases. As a minimum, all cases should be reviewed by the IPC Team on a weekly basis, ensuring enhanced communication with all staff including rapid communication of microbiology results.

6.11.3 A pharmacist and a Microbiologist in liaison with the Antimicrobial Lead will undertake a weekly antibiotic review on the ward (using local tools) for 3 weeks.

6.11.4 In conjunction with the IPC Team, environmental screening may be undertaken; additional cleaning or a deep clean of the whole ward will be undertaken where necessary.

6.11.5 Isolation practices and procedures must be reinforced by all staff to promote best practice; establishing an isolation ward or cohort bays if necessary. Staff and patient movement between affected and non-affected areas should be minimised and reduced movement of beds, commodes, trolleys and other equipment between areas.

6.11.6 The Trust has a duty to subject all outbreaks to a RCA and report all outbreaks as Serious Untoward Incidents (SUIs) to the Commissioners. This includes all ward closures that are due to diarrhoea shown to be associated with transmission of *C. difficile*.

6.12 Death certification

**Acute Services**

6.12.1 If a patient with CDI dies, the consultant responsible for the patient’s care must review 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 stated in Part 1 of the Medical Certificate of Cause of Death (MCCD). If CDI is not part of the sequence of events leading directly to death but contributed in some way to it, this should be stated in Part 2 of the MCCD. When CDI is recorded on either Part 1 or 2 of the MCCD, ‘*C. difficile* - death
6.12.2 The Trust will notify the Commissioners of every death of a patient where *C. difficile* is entered on either Part 1 or Part 2 of the MCCD; this will be reported as a SUI.

6.12.3 If a doctor is in doubt about the circumstances of death when writing the certificate, they should consult with the Microbiologist or DIPC.

6.12.4 Where the patient has been identified as a *C. difficile* carrier, this should not routinely be recorded on the MCCD unless the result is deemed clinically significant, the patient required treatment and after discussion with the Microbiologist or DIPC.

### 7 Training

All staff working on Trust premises, including Trust employed staff, agency and locum staff are responsible for accessing all relevant IPC policies (via intranet) in order to assist in the optimal management of their patients.

IPC principles are included in all mandatory IPC e-Learning training programmes. Management of *C. difficile* is included in the programmes for Medical, HCA and Nursing and Midwifery staff. Good antimicrobial stewardship is also included in the programme for medical staff.

### 8 Equality and Diversity

The Trust is committed to ensuring that, as far as is reasonably practicable, the way we provide services to the public and the way we treat our staff reflects their individual needs and does not discriminate against individuals or groups on any grounds. This policy has been appropriately assessed.

### 9 Monitoring

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<td>Information and Development Support Manager Patient Services</td>
<td>Trust Board, IPCC</td>
<td>Monthly</td>
<td></td>
</tr>
</tbody>
</table>
Monitoring of RCA outcomes and modified Saving Lives audits (Including:
- Stool sample collection
- Isolation (acute)
- Appropriate treatment regime
- Appropriate PPE usage
- Any case where death is recorded on Part 1 or 2 of the MCCD)

| Specimen transit and laboratory turnaround times | HCAI scorecard | IPC scientist | Healthcare | IPCC | Quarterly
|-----------------------------------------------|----------------|-------------|-----------|-----|--------|

10 Consultation and Review

Consultation of this policy was undertaken by members of IPCC and IPC Nurses. This policy will be reviewed annually by IPCC or as and when significant changes make earlier review necessary.

11 Implementation of Policy (including raising awareness)

Clinical Directors/Matrons/Sisters/Charge Nurses and Clinical Leads should ensure that staff are aware of this policy. This policy is available for staff to access via NUTH intranet.

IPC information is available via the Trust Intranet and Internet; additionally, patient information leaflets are available across the organisation.

12 References

- Clostridium difficile infection: How to deal with the problem, DH, December 2008
- A good practice guide to control Clostridium difficile: HPA regional microbiology network, Jan 2007
- Essential steps to safe clean care. DH 2006
- Update guidance on the diagnosis and reporting of Clostridium difficile, DH, March 2012
- Updated guidance on the management and treatment of Clostridium difficile infection. DH, May 2013.

• The Health and Social Care Act 2008, Code of Practice on the prevention and control of infections and related guidance (Revised 2015)

13 Associated Documentation
• Cleaning and Disinfection Procedure
• Decontamination of Healthcare Equipment following Patient Use and Prior to Service and/or Repair
• Decontamination of the Patient Environment (including Terminal and Deep Cleaning)
• Guidelines for Skin Care
• Hand Hygiene Policy
• Isolation Policy
• Standard Precautions
• Transport of Clinical Specimens
• Used Laundry Management Policy
• Waste Management Policy and Procedures

Author: Consultant Microbiologist, Matron IPC
# Bristol Stool Chart

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Separate hard lumps, like nuts (hard to pass)</td>
</tr>
<tr>
<td>2</td>
<td>Sausage-shaped but lumpy</td>
</tr>
<tr>
<td>3</td>
<td>Like a sausage but with cracks on its surface</td>
</tr>
<tr>
<td>4</td>
<td>Like a sausage or snake, smooth and soft</td>
</tr>
<tr>
<td>5</td>
<td>Soft blobs with clear-cut edges (passed easily)</td>
</tr>
<tr>
<td>6</td>
<td>Fluffy pieces with ragged edges, a mushy stool</td>
</tr>
<tr>
<td>7</td>
<td>Watery, no solid pieces. <strong>Entirely Liquid</strong></td>
</tr>
</tbody>
</table>
When to send a stool sample

**DO NOT SEND A STOOL SAMPLE:**

- X On the FIRST EPISODE of diarrhoea (unless the patient is admitted due to diarrhoea of unknown cause or it is clinically indicated)
- X If the patient has received LAXATIVES or LAXATIVES or APERIENTS, an ENEMA or BOWEL PREP within the last 24 hrs (unless the patient is systemically unwell / it is clinically indicated)
- X UNLESS ADVICE HAS BEEN SOUGHT FROM A MICROBIOLOGIST on the following patients:
  - Previously Clostridium difficile positive
  - Clostridium difficile carrier
  - Original sample was NEGATIVE but symptoms persist

**SEND A STOOL SAMPLE:**

- ✓ On the 2ND EPISODE of diarrhoea of unknown cause in 24 hrs
  (Type 5-7 on the Bristol Stool Chart)

**HOW TO SUBMIT STOOL SAMPLES**

- Request can only be approved by a Registered Nurse / Doctor
- Clinical details MUST be provided and include:
  - Current / recent antibiotics
  - Proton Pump Inhibitors (PPIs)
  - Patient diagnosis
- Ensure a sufficient quantity is sent for testing i.e. fills up to 1/5 of the container

If you have any queries regarding sample submission please discuss with a Microbiologist
Appendix 3

NuTH C. difficile testing & reporting algorithm

GDH EIA Screening Test

- **NEG**
  - CDIFF = NEG

- **POS**
  - Confirmatory TOXIN Test (Vidas)
    - **NEG**
    - Equivocal
    - **POS**
      - PCR molecular test
        - **NEG**
        - **POS**
          - CDIFF = NEG
          - CARRIER **

**CDIFF toxin negative:**
- Result automatically authorised
- No further action required

**CDIFF TOXIN POSITIVE RESULTS:**
- Lab will inform Microbiologist & IPCN
- Seek advice from Gastro team if required
- Add eRecord alert & perform RCA
- Mandatory reporting to HCAI DCS
- Consider ribotyping if PII or death

**Carrier of C. difficile:**
- Lab will inform Microbiologist & IPCN
- Seek advice from Gastro team if required
- Add eRecord alert
- Mandatory reporting NOT required

**GP Result** telephoned to GP practice by Lab
- GP to seek advice from Microbiologist/IPCN as required
- Result sent to Community IPCNs and alert added to eRecord (if patient has MRN)
- RCA completed (toxin positive cases)

**Result documented in Apex as:**
- C difficile: CARRIER
- This indicates C difficile carriage with the potential of toxin excretion
- Please contact Microbiology or the relevant Infection Prevent and Control Nurse if further advice required.

Issued by Microbiology: 20th July 2012
Validated by IPC Operational Group: 29th July 2012
Revised December 2015
Appendix 4

Explanation of *C. difficile* testing algorithm for medical and nursing staff

**Summary**

*Clostridium difficile* infection (CDI) remains a major cause of morbidity and mortality. CDI is caused by *Clostridium difficile* (*C. difficile*) bacteria producing toxins that cause loose stools and may lead to inflammation of the bowel wall and in the most serious cases pseudomembranous colitis. There is no perfect single diagnostic test for CDI at present; therefore we use a combination of tests. The tests are only reliable when there is a clinical suspicion of CDI, therefore stool samples should only be sent under these circumstances and results interpreted in light of the clinical picture.

**Types of *C. difficile* tests conducted in the laboratory:**

1. **GDH (Glutamate Dehydrogenase) TEST:** GDH is an enzyme that is produced by ALL *C. difficile* species (as well as other bacteria). 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;

2. **TOXIN TESTING:** This test looks for the presence of *C. difficile* toxin A and B in the stool, this test has poor reliability. Positive GDH & toxin tests suggest the patient has *C. difficile* and its toxin in their stool. If it is negative or equivocal PCR testing is carried out:

3. **MOLECULAR PCR TESTING:** This test looks for the presence of the genes that encode for the production of the *C. difficile* TOXIN. If it is positive in the context of a positive GDH test it implies that the patient harbours *C. difficile* bacteria with the capability to produce *C. difficile* toxin.

**What the results mean and the clinical implications:**

*C. difficile* TOXIN DETECTED (GDH +, Toxin +);
*C. difficile* toxin detected in the patients stool and this can cause CDI.

**Clinical implication:** Review in the clinical context, make a severity assessment and most likely start treatment for CDI in line with the antibiotic policies. Medical staff must review the patients medication including; antibiotics, laxatives and PPI prescriptions.

**IPC implication:** Isolate and commence enteric precautions.

*C. difficile* CARRIER (GDH +, Toxin – or equivocal, PCR +)
Implies that the patient carries *C. difficile* in their bowel that has the potential to produce *C. difficile* toxin however, the presence of the toxin has not been detected at this time but may cause disease.

**Clinical implication:** This result needs to be interpreted in the clinical context. The patient may have CDI (and the toxin test is a false negative) OR be a carrier of *C.*
difficile with the potential to develop CDI. If there is a clinical suspicion of CDI, treatment should be commenced after making a severity assessment. Any existing antibiotic, laxative and PPI prescriptions should be reviewed. It is essential to only prescribe antibiotics in these patients if absolutely necessary.

**IPC implication:** These patients may be infectious therefore should be isolated and commence enteric precautions.

*C. difficile* toxin NOT DETECTED (GDH -)
No microbiological evidence on this sample to suggest CDI.

**Clinical implication:** Interpret in the clinical context. If CDI strongly suspected, send a repeat sample. Review and if possible stop any unnecessary antibiotics (antibiotic associated colitis is a common cause of loose stools). Review laxative and PPI prescriptions.

**IPC implication:** Patients with unexplained diarrhoea should be isolated and commence enteric precautions.

Please contact Microbiology or the ID team if further advice required.
**Appendix 5**

**Clostridium difficile Clinical Management Pathway**

**Patient has diarrhoea**
- Commence Diarrhoea Care Pathway and isolate in single room (preferably en-suite), wear gloves and apron, hand wash with antiseptic solution and water. Terminally clean vacated bed-space
- Review medication and contact IPC Team as necessary
- Send stool sample for *C. difficile* testing, provide adequate information on specimen request

**C. difficile Toxin Negative**
No further action required

**C. difficile Toxin Positive/C. difficile Carrier**
(*C. difficile* infection (GDH +ve, toxin +ve). Note - *C. difficile* carriage is **not** the same as infection and should be evaluated with microbiology advice)
- IPCN will contact ward and Microbiologist will contact clinical team for review of antibiotics and other medication. (CAV ward nursing staff to contact out of hours medical cover to review patient/medication as required)
- Document treatment plan in notes and commence *C. difficile* Care Pathway
- Commence appropriate antibiotic therapy
- If diarrhoea ceases unexpectedly and/or quickly, look for:
  - Distended abdomen
  - Absent bowel sounds (?ileus)

**Mild-Moderate Disease (first episode):**
Patients not fulfilling criteria for severe disease or who are not neutropaenic

Microbiology advice
Treat: oral metronidazole 400mg tds 10-14 days

Symptoms not improving or worsening
**Reassess / Discuss with Microbiologist**
- Consider assessment by:
  - Dietician
  - Surgeon
- Consider change of therapy

**Mild-Moderate Disease:**
Patients not fulfilling criteria for severe disease

Treat: oral vancomycin 125mg qds 10-14 days

Symptoms not improving or worsening
**Reassess**

**Severe (not life threatening) disease:**
- WCC >15 x10^9/L
- Acutely rising blood creatinine (e.g. >50% increase above baseline)
- Temperature >38.5°C
- or evidence of severe colitis (abdominal signs, radiology)

Age ≥ 65 OR ongoing significant antibiotics required/comorbidities

**Microbiology advice**
**Severe and recurrent disease must have clinical review- Gastroenterology or Infectious Diseases**

Treat: Fidaxomicin 200mg bd 10-14 days ONLY after discussion (NOT in life threatening; these patients must be clinically reviewed)

If life threatening treat with oral vancomycin and IV metronidazole 500mg tds. Consider immunoglobulins and referral to surgery if no improvement over 3-7 days/worsening or high lactate and sepsis

**Recurrent disease (not life threatening)**
- OR
- Neutropenia (not life threatening)
  - (other immunocompromised patients should be discussed with microbiology)

**Microbiology advice**
**Severe and recurrent disease must have clinical review- Gastroenterology or Infectious Diseases**

Treat: Fidaxomicin 200mg bd 10-14 days ONLY after discussion (NOT in life threatening; these patients must be clinically reviewed)
Clinical waste in Patients Homes – Model Flow chart

Waste arising in patients home – carry out a risk assessment

Is the waste likely to cause a risk of infection?

YES

NO

If possible double bag and place into domestic waste (black bag)

Hazardous Infectious waste (CAT B)

Examples include:
- Waste containing a significant quantity of blood (e.g. haemodialysis)
- Dressings from infected blood stained wounds (e.g. HIV, Hepatitis B)
- Wound vacuum drains (excluding topical negative pressure)
- Acute gastro intestinal infections (e.g. Clostridium Difficile)
- Heavily exuding infected wounds (e.g. MRSA)

Dispose of as hazardous infected clinical waste (Orange bag) ready for collection

Additional considerations
- Gain prior consent from patient for storage and collection of hazardous infectious waste.
- Ensure safe storage away from children /animals (waste cannot be left on the street awaiting collection).
- Bags should be appropriately labelled (date, service and locality) and secured with plastic tag.
- Medicinal waste should be returned to patients pharmacy.
- Sharps waste generated by patient and not healthcare worker must go back to patients GP in appropriate sharps box.

The health care worker responsible for generating the waste must seek approval from their Cluster Co-ordinator for collection to be undertaken by the contracted waste supplier.

Cluster Co-ordinator to send details to contactor who will arrange collection

NB Staff will need to inform their Cluster Co-ordinator once waste collection service no longer required.
## District Nursing Service

### Process for Collection of Clinical Waste from Patient Home

<table>
<thead>
<tr>
<th>Process</th>
<th>Responsibility</th>
<th>Timescale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify need for collection of clinical waste according to flow chart Appendix 1</td>
<td>District Nurse</td>
<td></td>
</tr>
<tr>
<td>Forward Request Form to Cluster Co-ordinator for authorisation</td>
<td>District Nurse</td>
<td></td>
</tr>
<tr>
<td>Check Request Form + authorise Forward via email to SRCL (<a href="mailto:sallan@srl.com">sallan@srl.com</a>, <a href="mailto:myates@srl.com">myates@srl.com</a>, <a href="mailto:adevlin@srl.com">adevlin@srl.com</a>) Copy to <a href="mailto:Angie.Drinkald@newcastle-pct.nhs.uk">Angie.Drinkald@newcastle-pct.nhs.uk</a> <a href="mailto:Jason.Mitchell@nuth.nhs.uk">Jason.Mitchell@nuth.nhs.uk</a></td>
<td>Cluster Co-ordinator</td>
<td></td>
</tr>
<tr>
<td>Input details onto spreadsheet</td>
<td>Admin Team Lead</td>
<td></td>
</tr>
<tr>
<td>Confirmation received SRCL to 'Reply to All' with confirmation</td>
<td>SRCL</td>
<td></td>
</tr>
<tr>
<td>Email District Nurse to confirm service set up</td>
<td>Admin Team Lead</td>
<td></td>
</tr>
<tr>
<td>Forward Spreadsheet to clinical Nurse Lead monthly for audit Copy to <a href="mailto:Jason.Mitchell@nuth.nhs.uk">Jason.Mitchell@nuth.nhs.uk</a></td>
<td>Admin Team Lead</td>
<td></td>
</tr>
<tr>
<td>Inform Central Admin when service to cease</td>
<td>District Nurse</td>
<td>As soon as possible when identified</td>
</tr>
<tr>
<td>Email SRCL (<a href="mailto:sallan@srl.com">sallan@srl.com</a>, <a href="mailto:myates@srl.com">myates@srl.com</a>, <a href="mailto:adevlin@srl.com">adevlin@srl.com</a>) to cancel service Using standard email memo Copy to <a href="mailto:Jason.Mitchell@nuth.nhs.uk">Jason.Mitchell@nuth.nhs.uk</a> Copy to cluster co-ordinator for information</td>
<td>Admin Team Lead</td>
<td>As soon as possible when identified</td>
</tr>
</tbody>
</table>
# Request for Collection of Clinical Waste from a Patient’s Home

**SRCL Account Number: 9015085**

<table>
<thead>
<tr>
<th>Patient’s Name</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td></td>
</tr>
<tr>
<td>Post Code</td>
<td></td>
</tr>
<tr>
<td>Telephone Number</td>
<td></td>
</tr>
</tbody>
</table>

**Has the waste been risk assessed and findings recorded on patients care plan?**

- [ ] Yes
- [ ] No

**Has the patient given consent to the waste being stored within their home until collection?**

- [ ] Yes
- [ ] No

## Type of Waste

<table>
<thead>
<tr>
<th>Infectious Clinical (i.e. dressings, swabs)</th>
<th>Medicinally Contaminated</th>
<th>Infectious Clinical Liquid Waste (i.e. wound drains)</th>
<th>Cytotoxic/Cytostatic Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

**Orange Bag**

**Yellow Bag**

**Rigid Leak Proof Container with Orange Lid**

**Rigid Leak Proof Container with Purple Lid**

**Amount to be collected and Frequency *i.e. 1 bag once a week***

**Date waste collection to commence**

<table>
<thead>
<tr>
<th>Name of Requestor</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Other Comments** *(Please include details of access restrictions etc)*

**Once completed forward this form to your Cluster Co-ordinator for authorisation.**

**Please Note:** You must inform your Cluster Co-ordinator when the collection is no longer required.

**For Office Use Only:**

<table>
<thead>
<tr>
<th>Cluster Co-ordinator Name</th>
<th>Date Authorised</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Once authorised, Cluster Co-ordinator to email form onto:** [Support@srcl.com](mailto:Support@srcl.com) (copying in District Nursing Admin, [myates@srcl.com](mailto:myates@srcl.com) and [jason.mitchell@nuth.nhs.uk](mailto:jason.mitchell@nuth.nhs.uk)).
Clostridium difficile toxin RCA flow chart

---

**Post Day-3 case**

- IPCN (acute) requests RCA from
  - Clinical team (Medic, Matron)
  - IPCN (CCG) if appropriate

**Pre Day-3 case**

- IPCN (CCG) requests RCA from
  - Acute clinical team and IPCN Ste Lead (to complete highlighted sections only)
  - Liaise with GP to complete RCA

**GP case**

- IPCN (CCG) liaises with GP to complete RCA

---

**Clinical team return RCA within 5 working days to Information Manager and Development Support Patient Services**

**IPCN (CCG) return relevant information to Information Manager and Development Support Patient Services**

**Clinical team return RCA to IPCN (CCG) within 5 working days**

**IPCN (CCG) completes RCA and forwards to Information Manager and Development Support Patient**

**Completed forms circulated by Information Manager and Development Support Patient Services to DIPC, ICD, Matron IPC, Antimicrobial Pharmacist IPCN for review**

**Appeal**

**No appeal**

---

**Information Manager and Development Support Patient Services circulate to DIPC, ICD, Matron IPC, Antimicrobial Pharmacist IPCN for review and to consider SIRM**

**Executive Director of Nursing, Patient Safety & Quality Newcastle Gateshead CCG to report to Quality, Safety and Risk Committee**

---

**IPCN (CCG) completes RCA and forwards to SIRM**

**SIRM**

**SIRM if required**
**Clostridium difficile (C. difficile) Root Cause Analysis (RCA) Toolkit (in-patient, post-3 days)**

The purpose of this toolkit is to help staff conduct a post infection review in the case of *C. difficile* infection (CDI). **Completion of this RCA will be led by the acute provider, where appropriate, additional information will be provided by GP and Community IPCN.**

<table>
<thead>
<tr>
<th>Name of staff completing form</th>
<th>Consultant/SpR</th>
<th>Matron</th>
<th>Sr/CN</th>
<th>IPCN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of completion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. **CASE DETAILS**

<table>
<thead>
<tr>
<th>Patient name</th>
<th>Consultant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital identification no.</td>
<td>DOB</td>
</tr>
<tr>
<td>HDCS Case no.</td>
<td>Male / Female</td>
</tr>
<tr>
<td>Admission date to Trust and ward admitted to</td>
<td>Current ward and admission date to this ward</td>
</tr>
<tr>
<td>Date onset of type 5 – 7 stool</td>
<td>Date <em>C. difficile</em> result confirmed</td>
</tr>
</tbody>
</table>

**Source of admission e.g. care home, own home**

**Inter-ward transfers on this admission (including dates and bed spaces)**

1.1 **Introduction**

Reason for admission *(state if the patient admitted with diarrhoea)*

| Write a brief description of underlying condition and treatment |

1.2 **Risk factors**

<table>
<thead>
<tr>
<th>Risk</th>
<th>Yes / No / Comments (Delete as appropriate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 65 yrs old</td>
<td>Yes / No</td>
</tr>
<tr>
<td>History of <strong>C. difficile</strong></td>
<td>Yes / No. If yes date confirmed:</td>
</tr>
<tr>
<td>---------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Pre-existing bowel disease</td>
<td>Yes / No</td>
</tr>
<tr>
<td>Proton Pump Inhibitor</td>
<td>Yes / No</td>
</tr>
<tr>
<td>Immunosuppression</td>
<td>Yes / No</td>
</tr>
<tr>
<td>Any antibiotics in last 3 months (inc. GP, OPD etc.)</td>
<td>Yes / No</td>
</tr>
<tr>
<td>Enteral feed (include route)</td>
<td>Yes / No</td>
</tr>
<tr>
<td>Healthcare attendance in last 3 months</td>
<td>Yes / No</td>
</tr>
<tr>
<td>Resident in long term care facility</td>
<td>Yes / No</td>
</tr>
<tr>
<td>Social services e.g. Carers</td>
<td>Yes / No</td>
</tr>
<tr>
<td>Community Health Services e.g. DN</td>
<td>Yes / No</td>
</tr>
<tr>
<td>If known, has the patient been in contact with a confirmed <strong>C. difficile</strong> case (toxin or carrier) in last 3 months</td>
<td>Yes / No. If yes, when and where:</td>
</tr>
</tbody>
</table>

### 2. DETECTION AND DIAGNOSIS

<table>
<thead>
<tr>
<th>Date &amp; time of onset of symptoms</th>
<th>Date &amp; time symptoms first documented on BSC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specimen collection</td>
<td></td>
</tr>
<tr>
<td>Location where specimen was taken</td>
<td>Date and time taken</td>
</tr>
<tr>
<td></td>
<td>Date received in lab</td>
</tr>
<tr>
<td></td>
<td>Date result confirmed</td>
</tr>
<tr>
<td></td>
<td>Result</td>
</tr>
</tbody>
</table>

Record inflammatory markers at time of specimen collection

<table>
<thead>
<tr>
<th>WCC</th>
<th>CRP</th>
<th>Temperature</th>
</tr>
</thead>
</table>

Was the stool specimen sent on the second episode of type 5 – 7 diarrhoea? If no – explain why.

Was there a delay in sending the specimen to the lab? If yes – explain why.

### 3. MANAGEMENT AND TREATMENT

Was the patient isolated on first episode of suspected infective diarrhoea? If no, explain why.

Date patient isolated

Has the patient used a communal toilet prior to **C. difficile** positive result? If yes, was the toilet cleaned with Actichlor plus?

Was treatment required for this episode of **C. difficile**? If yes, state treatment and start date. If no, what were the clinical factors that were used to determine treatment was not required?

If this episode is a suspected recurrence, were previous episode(s) of **C. difficile** treatment as per Trust policy?
Was this *C. difficile* mild, moderate, severe, life-threatening? (Please refer to Policy). Is this documented in the notes?

Were Microbiology involved in *C. difficile* management?

Were Gastroenterology or Infectious Diseases involved in *C. difficile* management?

4. DOCUMENTATION

Date Diarrhoea Care Pathway commenced? Are all relevant sections of the Diarrhoea Care Pathway complete (including BSC)? If not, explain why.

Date *C. difficile* Care Pathway commenced? Are all relevant sections of *C. difficile* Care Pathway complete? If not, explain why.

5. BEING OPEN AND DUTY OF CANDOUR

What date and time was the clinical team aware of the confirmed *C. difficile* result?

What date was the result and implications of this discussed with the patient (or next of kin where appropriate)?

Is there evidence of this explanation recorded in the Medical notes?

Was the patient information leaflet/card provided and recorded on *C. difficile* Care Pathway?

Was the medical treatment plan commenced and documented in medical notes?

6. MEDICATION - MUST BE COMPLETED BY MEDICAL STAFF

6.1 Antibiotic history for the last 3 months (include prophylactic antibiotics and treatment via GP/OPD etc. where appropriate)

<table>
<thead>
<tr>
<th>Antibiotic (please state route)</th>
<th>Reason for prescribing (including specimen result)</th>
<th>Stop/review date/indication (Yes / No)</th>
<th>Date commenced</th>
<th>Date of last dose</th>
<th>Was Microbiology advice sought for each antibiotic (Yes / No)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

6.2 Proton Pump Inhibitor treatment prior to/at time of diagnosis (include treatment via GP/OPD etc. where appropriate)
<table>
<thead>
<tr>
<th>Drug</th>
<th>Rationale</th>
<th>Stop/review/ indication date (Yes / No)</th>
<th>Date commenced</th>
<th>Date of last dose</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Is PPI treatment appropriate?</td>
<td>Yes / No</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6.3 Laxatives

<table>
<thead>
<tr>
<th>Drug</th>
<th>Date commenced</th>
<th>Date of last dose</th>
</tr>
</thead>
</table>

7. ENVIRONMENTAL FACTORS

Were there any deficiencies in the environment or cleanliness of equipment in the last 3 months?

Are isolation and hand hygiene prompt notices in place?

Is there a stock of Personal Protective Equipment (PPE) available and in use?

Are there adequate hand hygiene facilities available and are soaps and hand towel dispensers stocked and in good working order?

Are ward commodes visibly clean and in good condition?

Have there been any cleaning issues on the ward for one week prior to the C. difficile result?

Record the previous environmental cleanliness audit results prior to this case of C. difficile:

<table>
<thead>
<tr>
<th>Date</th>
<th>Result</th>
</tr>
</thead>
</table>

Record date and results from last two hand hygiene audits prior to this case of C. difficile:

<table>
<thead>
<tr>
<th>Date</th>
<th>Opportunity</th>
<th>Technique</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Were there any cases of C. difficile (including carriers) on this ward in the last 3 months? If yes, how many were attributed to this ward and how many were community-acquired?

Has ribotyping/MVLA typing been performed on this, or previous cases of C. difficile, in the last 3 months?

Has any environmental screening been undertaken in the last 3 months? If yes, what were the results (include ribotyping/MVLA typing if available)?

Outline any details of additional cleaning measures that have been instituted over the previous 3 months. (Ward decant, HPV, UV)
8. ORGANISATIONAL ISSUES

Are staff to patient ratios appropriate or at least in line with local agreement in all of the areas where the patient was managed prior to *C. difficile*?

Are there any specific issues with staff capacity prior to this case of *C. difficile*?

Is there evidence that IPC mandatory training and other IPC education has been undertaken by staff relevant to this case?

Current IPC mandatory training compliance rates:

9. OPTIMISATION OF DIARRHOEA CONTROL IN THE ORGANISATION

Is there evidence of poor documentation and communication related to this patient?

Has the rate of suspected infective diarrhoea increased in this clinical area during the month prior to this case?

Was this investigated? Was a reason for this found?

What measures were put in place?

If there was any non-compliance – explain why.

10. LESSONS LEARNED

Outline the lessons learned from this episode.

How has the learning been addressed?

Are there any recurring themes with this case and previous case assessment?

What is the hypothesis for why these cases are still happening?

What interventions has the organisation put in place to prevent further cases of *C. difficile*?

What factors appear to be responsible for their lack of success?

11. PREVENTABILITY

State whether you have identified any ‘lapses in care’ that could have contributed to the development of this *C. difficile* case.

In order to facilitate learning and optimisation of patient care, please identify any other lapses in care that did not contribute to the development of *C. difficile* in this case.
If you consider this case occurred despite no lapses in care (and so was deemed not to be ‘preventable’), outline your reason(s) why including areas of good practice.

<table>
<thead>
<tr>
<th>CLINICAL OUTCOME</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>What was the clinical outcome? Recovered, PMC, Toxic megacolon, Colectomy (if unknown at time of review – to be completed at SIRM/prior to appeal)</td>
<td></td>
</tr>
</tbody>
</table>

Did the patient die within 30 days of *C. difficile* diagnosis? If yes, was the death linked to *C. difficile* and was it recorded on the death certificate? *(If *C. difficile* recorded on death certificate please complete ‘*C. difficile* death certificate form’)*

| SUMMARY OF MEETING WITH COMMISSIONERS |  |
**Clostridium difficile (C. difficile) Root Cause Analysis (RCA) Toolkit**

(GP/pre-3 days in-patient cases)

The purpose of this toolkit is to help staff conduct a post infection review in the case of *C. difficile* infection (CDI). **Completion of this RCA will be led by GP and Community IPCN, where the patient is a current in-patient, additional information will be provided by the acute provider.**

<table>
<thead>
<tr>
<th>Name of staff completing form</th>
<th>GP</th>
<th>CCG Quality Lead</th>
<th>Community IPCN</th>
<th>Date of completion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

**For in-patients only**

<table>
<thead>
<tr>
<th>Consultant/SpR</th>
<th>Matron</th>
<th>Sr/CN</th>
<th>IPCN</th>
<th>Date of completion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. **CASE DETAILS**

<table>
<thead>
<tr>
<th>Patient name</th>
<th>GP details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NHS number/Hospital identification no.</th>
<th>DOB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HDCS Case no.</th>
<th>Male / Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Consultant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patient address</th>
<th>Care home □ Own home □</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hospital admissions/attendances/other healthcare providers in last 3 months (including dates)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inter-ward transfers on this admission (including dates and bed spaces) (only to be completed if a current in-patient)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Domestic information**

<table>
<thead>
<tr>
<th>Does the patient have any household pets? If so, type of pet?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Has the patient had contact with children &lt; 1 year or carer for relative at risk of CDI?</th>
</tr>
</thead>
</table>
1.1 Introduction
This section to be completed by the organisation where the patient is located

Reason for admission *(state if the patient admitted with diarrhoea)*
*(only to be completed if a current in-patient)*

Write a brief description of underlying condition and treatment

1.2 Risk factors
This section to be completed by all relevant organisations

<table>
<thead>
<tr>
<th>Risk</th>
<th>Yes / No / Comments (Delete as appropriate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 65 yrs old</td>
<td>Yes / No</td>
</tr>
<tr>
<td>History of <em>C. difficile</em></td>
<td>Yes / No. If yes date confirmed:</td>
</tr>
<tr>
<td>Pre-existing bowel disease</td>
<td>Yes / No</td>
</tr>
<tr>
<td>Proton Pump Inhibitor</td>
<td>Yes / No</td>
</tr>
<tr>
<td>Immunosuppression</td>
<td>Yes / No</td>
</tr>
<tr>
<td>Any antibiotics in last 3 months (inc. GP, OPD, in-patient episodes etc.)</td>
<td>Yes / No</td>
</tr>
<tr>
<td>Enteral feed (include route)</td>
<td>Yes / No</td>
</tr>
<tr>
<td>Healthcare attendance in last 3 months</td>
<td>Yes / No</td>
</tr>
<tr>
<td>Resident in long term care facility</td>
<td>Yes / No</td>
</tr>
<tr>
<td>Social services e.g. Carers</td>
<td>Yes / No</td>
</tr>
<tr>
<td>Community Health Services e.g. DN</td>
<td>Yes / No</td>
</tr>
<tr>
<td>If known, has the patient been in contact with a confirmed <em>C. difficile</em> case (toxin and carrier) in last 3 months</td>
<td>Yes / No. If yes, when and where:</td>
</tr>
</tbody>
</table>

2. DETECTION AND DIAGNOSIS
This section to be completed by the organisation where the specimen was taken

<table>
<thead>
<tr>
<th>Date of onset of symptoms</th>
<th>Date patient/carer reported symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Specimen collection

<table>
<thead>
<tr>
<th>Location where specimen was taken</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Date and time taken</th>
<th>Date received in lab</th>
<th>Date result confirmed</th>
<th>Date GP/ward notified</th>
<th>Result</th>
</tr>
</thead>
</table>

Record inflammatory markers at time of specimen collection

<table>
<thead>
<tr>
<th>WCC</th>
<th>CRP</th>
<th>Temperature</th>
</tr>
</thead>
</table>

*For specimens from primary care*, was *C. difficile* testing of this patient’s diarrhoeal specimen clinically indicated, age-related or both?
Was there a delay in obtaining and sending the specimen? If yes – explain why.

3. MANAGEMENT AND TREATMENT

3.1 Management and environmental factors

This section to be completed by the primary care provider

Care Home (only to be completed if patient normally resides in care home)

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was the resident isolated in a single room on onset of symptoms?</td>
<td>If not, explain why.</td>
</tr>
<tr>
<td>Date resident isolated</td>
<td></td>
</tr>
<tr>
<td>Was the resident confused/disorientated/unable to adhere to isolation?</td>
<td>If not, what measures were put in place?</td>
</tr>
<tr>
<td>Was the Bristol Stool Chart in use and used correctly upon onset of symptoms?</td>
<td></td>
</tr>
<tr>
<td>Was a fluid balance chart used correctly? If not, why not?</td>
<td></td>
</tr>
<tr>
<td>Did the resident use a communal toilet/commode prior to <em>C. difficile</em> positive result?</td>
<td></td>
</tr>
<tr>
<td>Is there a stock of Personal Protective Equipment (PPE) available and in use?</td>
<td></td>
</tr>
<tr>
<td>Are there adequate hand hygiene facilities available and are soaps and hand towel dispensers stocked and in good working order?</td>
<td></td>
</tr>
<tr>
<td>Are commodes visibly clean and in good condition?</td>
<td></td>
</tr>
<tr>
<td>Was a foot-operated bin in the resident’s room, while symptomatic, for the disposal of clinical waste?</td>
<td></td>
</tr>
</tbody>
</table>

This section to be completed by the acute care provider

In-patient area (only to be completed if current in-patient)

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was the patient isolated on first episode of suspected infective diarrhoea/on admission? If no, explain why.</td>
<td></td>
</tr>
<tr>
<td>Date isolated</td>
<td></td>
</tr>
<tr>
<td>Has the patient used a communal toilet prior to <em>C. difficile</em> positive result? If yes, was the toilet cleaned with Actichlor plus?</td>
<td></td>
</tr>
<tr>
<td>Are isolation and hand hygiene prompt notices in place?</td>
<td></td>
</tr>
<tr>
<td>Is there a stock of Personal Protective Equipment (PPE) available and in use?</td>
<td></td>
</tr>
</tbody>
</table>
Are there adequate hand hygiene facilities available and are soaps and hand towel dispensers stocked and in good working order?

Are ward commodes visibly clean and in good condition?

Have there been any cleaning issues on the ward for one week prior to the *C. difficile* result?

Date Diarrhoea Care Pathway commenced? Are all relevant sections of the Diarrhoea Care Pathway complete (including BSC)? If not, explain why.

Date *C. difficile* Care Pathway commenced? Are all relevant sections of *C. difficile* Care Pathway complete? If not, explain why.

### 3.2 Treatment

**This section to be completed by the organisation where treatment commenced**

Was treatment required for this episode of *C. difficile*? If yes, state treatment and start date. If no, what were the clinical factors that were used to determine treatment was not required?

Was this *C. difficile* mild, moderate, severe, life-threatening? (as per policy/national guidance)

Were Microbiology involved in *C. difficile* management?

Were Gastroenterology or Infectious Diseases involved in *C. difficile* management?

### 4. BEING OPEN AND DUTY OF CANDOUR

**This section to be completed by the organisation where the patient was located when the result was confirmed**

What date and time was the clinical team aware of the confirmed *C. difficile* result?

What date was the result and implications of this discussed with the patient (or next of kin where appropriate)?

Is there evidence of this explanation?

Was a patient information leaflet/card provided?

Was the treatment plan commenced and documented in relevant notes?

### 5. MEDICATION

**This section to be completed by the primary care provider with support from acute provider where appropriate**
5.1 Antibiotic history **in primary care in the last 3 months**

<table>
<thead>
<tr>
<th>Antibiotic (please state route)</th>
<th>Reason for prescribing (including specimen result)</th>
<th>Date commenced</th>
<th>Date of last dose</th>
<th>Prescribed by GP</th>
<th>Complies with local prescribing guidelines</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

5.2 Antibiotic history **in hospital for the last 3 months (including prophylactic antibiotics)**

<table>
<thead>
<tr>
<th>Antibiotic (please state route)</th>
<th>Reason for prescribing (including specimen result)</th>
<th>Stop/review date/indication (Yes / No)</th>
<th>Date commenced</th>
<th>Date of last dose</th>
<th>Was Microbiology advice sought for each antibiotic (Yes / No)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

5.3 Proton Pump Inhibitor history **(primary and secondary care)** prior to and at the time of diagnosis

<table>
<thead>
<tr>
<th>Drug</th>
<th>Rationale</th>
<th>Date commenced</th>
<th>Date of last dose</th>
<th>Prescribed by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Is PPI treatment appropriate? Yes / No

5.4 Laxatives **(primary & secondary care and laxatives purchased over-the-counter)**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Date commenced</th>
<th>Date of last dose</th>
<th>Prescribed by / self-medication</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
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</tr>
</tbody>
</table>

6. **OPTIMISATION OF DIARRHOEA CONTROL IN THE ORGANISATION**

**This section to be completed by the relevant provider in community**

Is there evidence of poor documentation and communication related to this patient?  

Has the rate of suspected infective diarrhoea increased in this care home during the previous 4 weeks prior to this case? **(care homes only)**

Was this investigated? Was a reason for this found?
What measures were put in place?

If there was any non-compliance – explain why.

### 7. LESSONS LEARNED
This section to be completed by the relevant provider in community

Outline the lessons learned from this episode.

How will/has the learning been addressed?

Are there any recurring themes with this case and previous case assessment?

What is the hypothesis for why these cases are still happening?

What interventions will/has the organisation put in place to prevent further cases of *C. difficile*?

What factors appear to be responsible for their lack of success?

### 8. PREVENTABILITY
This section to be completed by the relevant provider in community

State whether you have identified any 'lapses in care' that could have contributed to the development of this *C. difficile* case.

In order to facilitate learning and optimisation of patient care, please identify any other lapses in care that did not contribute to the development of *C. difficile* in this case.

If you consider this case occurred despite no lapses in care (and so was deemed not to be ‘preventable’), outline your reason(s) why including areas of good practice.
**C. difficile – death certificate form**

This section is only to be completed in the event of a patient death where *C. difficile* is recorded on the death certificate. **This section and a Datix incident form must be completed by the patient’s Consultant.**

Please return the completed RCA electronically to Chris.ellis@nuth.nhs.uk within 5 working days of request.

<table>
<thead>
<tr>
<th>Patient Name</th>
<th>MRN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultant</td>
<td>Datix incident number</td>
</tr>
</tbody>
</table>

**Areas for consideration:**

1. Which part of the death certificate was *Clostridium difficile* infection (CDI) noted?
   - ☐ Part 1 of MCCD
   - ☐ Part 2 of MCCD

   Please include all details from the death certificate

2. Has the next of kin been informed CDI is recorded on either Part 1 or Part 2 of the death certificate?
   - ☐ Yes
   - ☐ No

3. How would you categorise the patient’s condition on admission?
   - ☐ The patient had an acute or chronic condition expected to be rapidly fatal within 1 month
   - ☐ The patient had an acute or chronic condition expected to be fatal within 1 – 2 months
   - ☐ The patient had an acute or chronic condition expected to be fatal in over 12 months
   - ☐ The patient had an acute or chronic condition not expected to be fatal
   - ☐ Insufficient data to categorise as above

   If insufficient data please specify:

4. Was there evidence that the patient was recovering from the illness for which they were admitted?
   - ☐ Yes
   - ☐ No
   - ☐ N/A
   - ☐ Unable to determine

5. Was there evidence that the patient died as a direct result of the admitting illness?
   - ☐ Yes
   - ☐ No
   - ☐ N/A
   - ☐ Unable to determine

6. Was there evidence that diarrhoea and/or other symptoms and
### 6. Aside from CDI, what other serious illnesses were diagnosed in hospital?

<table>
<thead>
<tr>
<th>Illness</th>
<th>Comment on severity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 7. Was any of the following present after diagnosis of CDI?

<table>
<thead>
<tr>
<th>Marker</th>
<th>Yes</th>
<th>No</th>
<th>Not measured or recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>White cell count &gt;15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creatinine level &gt;150</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albumin level &lt;25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRP level &gt;50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fever &gt;38°C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abdominal pain, tenderness or distension</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diarrhoea &gt;5 times a day</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deterioration in medical status not explicable by other illness</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 8. Was there evidence that the clinical course was:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Unable to determine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compatible with death from an admission illness?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compatible with death from a pre-existing illness?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compatible with death from a complicating illness (not CDI)?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compatible with severe CDI?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compatible with death from CDI?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 9. Does the evidence suggest that in this patient CDI:

<table>
<thead>
<tr>
<th></th>
<th>Definitely</th>
<th>Probably</th>
<th>Possibly</th>
<th>Unlikely</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contributed to this patient’s death?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was the primary cause of death?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Did the death occur <30 days after diagnosis?**

**Any further comments:**

---

**Death certificate completed by:**

- **Name:**
- **Signature:**
- **Designation:**

**Proforma completed by:**

- **Name:**
- **Signature:**
- **Designation:**
The Newcastle upon Tyne Hospitals NHS Foundation Trust

Equality Analysis  Form A

This form must be completed and attached to any procedural document when submitted to the appropriate committee for consideration and approval.

PART 1

1. Assessment Date: 20/11/2015

2. Name of policy / strategy / service:
   C. difficile Policy

3. Name and designation of Author:
   Dr Manju Narayanan, Consultant Microbiologist, ICD, Louise Hall, Matron IPC

4. Names & designations of those involved in the impact analysis screening process:
   Dr Ashley Price, DIPC,

5. Is this a: Policy ☒ Strategy ☐ Service ☐
   Is this: New ☐ Revised ☒
   Who is affected: Employees ☒ Service ☒ Users ☒ Wider Community ☒

6. What are the main aims, objectives of the policy, strategy, or service and the intended outcomes? (These can be cut and pasted from your policy)
   The aim of this policy is to prevent avoidable CDI by supporting clinical staff in initiating early diagnosis, prompt isolation, and compliance with hand hygiene, personal protective equipment (PPE) and antibiotic stewardship. It also supports risk assessment for staff working in community settings.

7. Does this policy, strategy, or service have any equality implications? Yes ☒ No ☐
   If No, state reasons and the information used to make this decision, please refer to paragraph 2.3 of the Equality Analysis Guidance before providing reasons:
## 8. Summary of evidence related to protected characteristics

<table>
<thead>
<tr>
<th>Protected Characteristic</th>
<th>Evidence, i.e. What evidence do you have that the Trust is meeting the needs of people in various protected Groups</th>
<th>Does evidence/engagement highlight areas of direct or indirect discrimination? If yes describe steps to be taken to address (by whom, completion date and review date)</th>
<th>Does the evidence highlight any areas to advance opportunities or foster good relations. If yes what steps will be taken? (by whom, completion date and review date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race / Ethic origin (including gypsies and travellers)</td>
<td>Provision of Interpreting service E&amp;D Training</td>
<td>Studies show that when interpreters were provided, patients had a better understanding of their diagnoses and treatment plan than patients without interpreters. Ensure communication support is available.</td>
<td>None</td>
</tr>
<tr>
<td>Sex (male/ female)</td>
<td>Male and female practitioners are available to promote the dignity of patients when required</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Religion and Belief</td>
<td>Chaplaincy service provided with links to leaders of major faiths</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Sexual orientation including lesbian, gay and bisexual people</td>
<td>HIV listening service which is peer listening/support service for people diagnosed HIV positive – provides annual training events to support listening skills.</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Age</td>
<td>Innovations to support people with Dementia</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Disability – learning difficulties, physical disability, sensory impairment and mental health. Consider the needs of carers in this section</td>
<td>Provision of BSL Signers and Deaf Blind Guides LD Liaison Nurse Links to Psychological and Mental Health Services Involving family is included in the policy</td>
<td>Information in appropriate formats is needed to support effective treatment Ensure communication support is available.</td>
<td>None</td>
</tr>
<tr>
<td>Gender Re-assignment</td>
<td>Gender Identity sub group to identify and address needs in relation to</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
9. Are there any gaps in the evidence outlined above? If ‘yes’ how will these be rectified?

No

10. Engagement has taken place with people who have protected characteristics and will continue through the Equality Delivery System and the Equality Diversity and Human Rights Group. Please note you may require further engagement in respect of any significant changes to policies, new developments and or changes to service delivery. In such circumstances please contact the Equality and Diversity Lead or the Involvement and Equalities Officer.

Do you require further engagement? Yes [ ] No [x]

11. Could the policy, strategy or service have a negative impact on human rights? (E.g. the right to respect for private and family life, the right to a fair hearing and the right to education?)

No

PART 2

Name: [Louise Hall]

Date of completion: [20/11/2015]

(If any reader of this procedural document identifies a potential discriminatory impact that has not been identified, please refer to the Policy Author identified above, together with any suggestions for action required to avoid/reduce the impact.)