Trust Policy	Worcestershire Acute Hospitals NHS Trust

Policy for the Management of *Clostridiodes difficile* Infection (CDI) and Transmission Prevention

Department / Service:	Infection Prevention and Control
Originator:	Dr Emma Yates - Co-Infection Control Doctor
Accountable Director:	Sarah Shingler (Director of Infection Prevention and Control)
Approved by:	Trust Infection Prevention and Control Committee
Date of approval:	23rd May 2024
First Revision Due:	23rd May 2027
Target Organisation(s)	Worcestershire Acute Hospitals NHS Trust
Target Departments	All Clinical Departments
Target staff categories	All staff and contractors

Policy Overview:
This policy is intended to give full advice on the prevention, identification, and management of *Clostridioides difficile* infection (CDI).

Key amendments to this policy

Date	Amendment	Approved by:
	Note: Amendments between May 2010 and May 2022 removed in February 2024. Please see previous version for full audit trail.	
February 2024	Various amendments made to the policy: • Removal of all appendices • Structure of document • Reference made to Sunrise Electronic Patient Record (EPR) system. • Change of name of PHE to UKHSA and CCG to ICB	TIPCC
April 2024	Full policy review • New comments added on re-testing following initial negative result • Re-wording of importance of PPI/H2 receptor antagonist review with *C.difficile* • Addition of serum lactate values in assessment of severe *C.difficile* infection • Amendment of treatment duration recommendations of oral vancomycin for moderate and severe *C.difficille*. • Additional notes on *C.difficile* treatments • Addition of Bezlotoxumab in alternative treatment section.	

Contents page:

Appendices

Supporting Documents

Supporting Document 1	Equality Impact Assessment
Supporting Document 2	Financial Risk Assessment

1. Introduction and Scope of this document

This policy provides operational guidance for the prevention, control, and management of *Clostridiodes difficile* (C. *diff*) associated diarrhoea based on the prevalence of C. *diff* infection (CDI) both locally and nationally and considers national guidance (Department of Health 2008; Department of Health/Health Protection Agency 2009; Department of Health 2012; Public Health England (PHE) 2013; NICE guidelines; NG 199 2021).

The key elements of this policy are:

1. early identification of patients at risk
2. prompt recognition of symptomatic patients with appropriate isolation and implementation of appropriate precautions for these patients
3. early clinical and laboratory diagnosis
4. careful monitoring and symptom management
5. antibiotic stewardship
6. high standards of personal and environmental hygiene and cleanliness
7. completion of Post-Infection Reviews (PIRs) to identify whether a lapse in care contributed to the CDI.

2. Responsibility and Duties

All Trust staff are responsible for following the policy and to alert the IPCT about patients with suspected CDI.

3. Summary

Essential components in the prevention and control of onward transmission of CDI are:

- High index of suspicion:
  - Consider CDI in any patient who has diarrhoea and received antimicrobials in the preceding 3 months.
  - Consider CDI in any patient with unexplained diarrhoea and in receipt of cytotoxic chemotherapy.
  - Consider CDI in any patient who has an unexplained rising white cell count and/or CRP despite antimicrobial therapy for another condition.
  - Consider CDI when there is no clear alternative cause for diarrhoea.
- All symptomatic patients must have stool tested promptly.
- All symptomatic patients must have each episode of loose stool recorded on Sunrise EPR using the Bristol Stool Chart scale.
- Prudent antibiotic prescribing utilising Trust antibiotic prescribing guidelines.
- Prompt isolation of patients with *C.diff* diarrhoea and strict infection prevention and control practices.
- Fastidious hand washing with soap and water in line with the ‘5 moments of hand hygiene’ (WHO).
- Use of appropriate personal protective equipment (PPE).
- Enhanced environmental cleaning and the prudent use of high-level disinfectant products (under the direction of the IPCT), including Hydrogen peroxide vapour (HPV).

4. Policy detail

4.1. Introduction

4.1.1. What is *Clostridiodes difficile*

Clostridioides difficile is a Gram-positive, anaerobic spore-forming organism implicated as the main infective cause of antibiotic-associated diarrhoea and pseudomembranous colitis. *C. difficile* can survive for long periods of time in the healthcare environment. Colonisation is acquired by ingestion after contact with a contaminated environment, equipment, other patients, or the hands of staff. Approximately 3% of the population carry the organism as part of normal bowel flora without symptoms.

4.1.2. Primary *Clostridiodes difficile* infection (CDI)

Primary *C.difficile* infection (CDI) is strongly associated with the use of antibiotics prescribed to treat another condition or given prophylactically. CDI occurs when the normal flora of the bowel is disrupted. The main pre-disposing factors in adults are therefore:

1. Acquisition of the organism
2. Subsequent exposure to antibiotics, notably oral cephalosporins, quinolones, clindamycin, and broad-spectrum penicillins (e.g. co-amoxiclav)

Overgrowth of the organism within the large intestine and subsequent toxin production causes mucosal damage and inflammation. This gives rise to a diarrhoeal illness, which can vary from mild to a life-threatening form called “pseudomembranous colitis”. The latter condition is characterised by significant damage to the large bowel and may lead to gross dilatation and perforation. Patients may also carry *C. difficile* without symptoms, termed colonisation.

4.1.3. Patient risk groups

The patient groups at greatest risk of disease are:

- Those over 65 years of age (although any other age group may be susceptible)
- Immunocompromised individuals
- Those who have had gastrointestinal procedures or surgery.

4.1.4. Recurrence of CDI

Recurrence of CDI occurs in 15-20% of patients after discontinuation of treatment. Life threatening symptoms develop in 1-3% of patients with CDI. This disease can carry a high mortality rate in the frail elderly.

4.1.5. Transmission of *Clostridiodes difficile*

It has been firmly established that person-to-person transmission can occur in hospital and communal care settings. Outbreaks of infection can be prolonged and difficult to control. Large outbreaks of CDI associated with loss of life have occurred in healthcare facilities and it is therefore essential that the Trust takes appropriate action to minimise the occurrence of CDI and ensures robust management arrangements are always in place to prevent secondary spread.

4.2. *Clostridiodes difficile* infection risk factors

The following are considered CDI risk factors:

- Aged ≥65 years
- Multiple co-morbid conditions
- Chemotherapy
- Chronic renal disease
- Immunocompromise
- Gastrointestinal procedures/Bowel surgery
- Enteral feeding/NG tube
- Proton Pump inhibitors (PPI) and H2 antagonists
- Recent healthcare intervention
- Antibiotic therapy: almost all cases of CDI will have a recent history of antibiotic exposure.
- Previous diagnosis of CDI

4.3. Initial management of suspected cases

There are several causes of diarrhoea in hospitalised patients. The D&V risk assessment on Sunrise EPR provides guidance to help staff determine if the cause of the diarrhoea is likely infective in nature, thus posing a risk to others.

Patients with diarrhoea identified by the risk assessment as high-risk for CDI (Pathway B), should be promptly isolated with single use equipment, a stool sample sent to the laboratory for testing, and commenced on empiric therapy until the stool result is available. The use of the CDI care plan, available on Sunrise EPR, is also indicated.

4.3.1. Patients with previously diagnosed CDI

These patients should be identified at point of admission. If the patient is symptomatic, they should be assessed as a relapse/recurrence and treatment commenced if appropriate.

4.3.2. Symptoms

Symptoms of CDI include:

- Watery diarrhoea: defined as passing >2 type 5-7 Bristol Stool Chart stools in a 24-hour period.
- Offensive smelling stool which may be green or contain mucous.
- Abdominal pain/tenderness
- Fever
- Loss of appetite
- Nausea

4.3.3. SIGHT Protocol

The SIGHT protocol must be implemented at the onset of CDI symptoms.

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 control team (ICT) 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

4.4. Testing for *Clostridiodes difficile*

Stool samples loose enough to take the shape of the container, submitted from all hospital inpatients (excluding children under 2 years) will be tested routinely for the presence of toxigenic *C. difficile* in accordance with national guidance (Department of Health 2012) using a two-step testing algorithm. Formed stool will not be tested.

Routine *C. difficile* testing (screening GDH and toxin EIA) is undertaken 7 days a week. Samples should reach the laboratory on the WRH site by 11am for testing the same day. PCR testing for toxins is undertaken every day except Sunday. Testing for these samples is completed the next working day.

4.4.1. Stage 1 - Screening test

Stage 1 is the test for the presence of GDH (Glutamate dehydrogenase by antigen enzyme immunoassay). This enzyme is present in all strains of *C. difficile*, irrespective of the capacity to produce toxin. The test has a very good negative predictive value: that is, if GDH test is negative *C. difficile* is not present in the bowel.

If GDH negative, toxin testing is **not** required.

4.4.2. Stage 2 - Confirmation test

All samples which are GDH positive have a test for the presence of toxin using a *C. difficile* toxin A and B enzyme immunoassay (EIA).

- Toxin positive: Toxin present; confirms presence of toxigenic *C. difficile* which is actively producing toxin.
- Toxin negative: *C. difficile* present in bowel, but no demonstration of active toxin production

Samples which are GDH positive (evidence of *C. difficile* presence), but toxin negative (no active toxin production) go on to have a further confirmatory PCR test.

C.difficile PCR looks for presence of the genes which give the organism the capacity to produce toxin, that the initial toxin EIA test was unable to demonstrate as being actively produced at the time of testing.

A *C. difficile* positive sample identified as toxin negative, but PCR positive is still a clinically significant result. Although the *C. difficile* identified in the sample has not been demonstrated to be actively producing toxin, it has the capacity to do so, therefore from an infection prevention and control perspective, the patient should be managed in the same way as if the sample was positive via the toxin EIA alone.

Clinical management of patients with a PCR positive stool result is dependent on the symptoms the patient has as it may simply reflect colonisation with *C. difficile* and diarrhoea from another cause (i.e. norovirus). If CDI present, it is usually associated with early or milder disease, although not invariably.

4.4.3. Summary of testing algorithm and results

Test	Result	Interpretation
GDH	NEGATIVE	No evidence of *C.difficile*
	POSITIVE	Evidence of *C.difficile*
TOXIN A/B	NEGATIVE	Sample referred for Toxin PCR
	POSITIVE	Evidence of toxigenic *C.difficile* with active toxin production
PCR	NEGATIVE	No evidence of toxigenic *C.difficile*
	POSITIVE	Evidence of *C.difficile* with toxigenic capacity

4.4.4. Ribotyping

Where there is concern that cross-transmission of *C. difficile* has occurred, faecal samples will be referred by the laboratory to the UKHSA laboratory in Leeds for ribotyping.

4.4.5. Repeat testing.

Patients who have been confirmed as *C. difficile* positive should ***NOT*** have stool retested to determine clearance of infection. In patients who have been confirmed as *C. difficile* positive, stool may continue to be positive for several weeks and detection of organism does not necessarily indicate on-going infection.

If the clinical team are concerned about on-going infection with *C. difficile*, the patient should be discussed with the duty microbiologist and/or IPCT.

Repeated testing after 24hours following an **initial negative** sample during the same diarrhoeal episode may be useful in selected cases with ongoing clinical suspicion during an epidemic situation or in cases with high clinical suspicion during endemic situations

4.4.6. Testing in recurrent CDI

For patients who have tested positive for *C. difficile* in the preceding 28 days, stool samples submitted to the laboratory for testing will not routinely be tested for *C. difficile*. The sample will be stored by the laboratory. If the clinical team feel that testing is indicated, they should discuss with the duty microbiologist.

4.4.7. Procedure for informing of the result.

C.difficile results are available by approximately 3pm-4pm during the working week.
Both toxin-positive and PCR positive results are communicated to the ward teams by the duty microbiology team (Monday-Friday) or the on-call microbiologist (weekends and bank holidays). Advice on patient management, treatment, and on-going review in relation to *C. difficile*, including antimicrobial stewardship, is given. The result, along with the associated clinical advice, is made available through ICE.

Results are also communicated to the IPCT who undertake reviews with ward staff to ensure appropriate treatment has been commenced and that the appropriate measures have been put into place, including instigation of stool charts, the *C. difficile* care plan and quick guides on Sunrise EPR.

4.5. Clinical management of patients with *Clostridiodes difficile* diarrhoea

4.5.1. General Principles

- Stop unnecessary antibiotics. If antimicrobials cannot be stopped immediately, keep the course as short as safely possible.
- Stop antiperistalsics and opiates.
- Hydration (which may include IV fluids)
- Nutrition (Dietitian / NG feeding)
- Electrolyte correction (K+, Mg++)
- If incontinence severe, seek advice from IP&C Nurse; the FlexiSeal® Management System may prevent undue skin damage.
- Proton pump inhibitors (e.g. omeprazole) and H2 receptor antagonists (e.g. Famitidine) increase the risk of C.difficile infection. They should be stopped unless the risk of doing so outweighs the benefit.

4.5.2. Assessment of *Clostridiodes difficile* disease severity and treatment

Grade	Clinical findings	Treatment
Mild	• WCC not raised. • <5 type 5-7 stools in 24-hours.	• Oral vancomycin 125mg QDS for 10 days
Moderate	• WCC raised but < $15x10^9$/L • ≥5 type 5-7 stools in 24-hours.	• Oral vancomycin 125mg QDS for 10 to 14 days
Severe	One or more of the following present: • WCC ≥$15x\ 10^9$/L • CRP >150 • Acute rising serum creatinine (>50% rise above baseline • Temperature >38.5C • Evidence of severe colitis (abdominal or radiological signs) • Serum lactate > 2 mmol / l	• Vancomycin 125mg QDS orally for 10 to 14 days • Rectal vancomycin should also be considered. • If no clinical improvement, refer for urgent surgical review. • Continue to monitor
Life threatening	• Hypotension • Partial or complete ileus or toxic megacolon • CT evidence of severe disease	• Urgent surgical review for potential colectomy • Vancomycin 500mg QDS orally for 10 to 14 days PLUS IV metronidazole 500mg TDS • Rectal vancomycin should also be considered if ileus present

4.5.3 Note on treatments

Oral metronidazole is no longer recommended for treatment of mild/moderate *C.difficile* disease and should **NOT** be used

Oral vancomycin should be prescribed as the capsule formulation; however, the IV formulation can be given enterally if the patient is unable to take capsules i.e. treatment being given via NG or PEG

4.5.4 Treatment for patients unable to take oral medications.

Patients who are unable to take medication by mouth or NG/PEG should receive intravenous metronidazole.

4.5.5 Persistent diarrhoea

If the diarrhoea persists despite ≥10 days' treatment but the patient is clinically stable and the daily number of type 5-7 motions has decreased, the WCC is normal and there is no abdominal pain or distension, the persistent diarrhoea may be due to post-infective irritable bowel syndrome.

At this stage the clinical team could consider treating the patient with an anti-motility agent, such as loperamide. The patient should be closely observed for evidence of therapeutic response and to ensure there is no evidence of colonic dilatation.

4.6. Relapse/Recurrence

Recurrence or relapse following an episode of CDI is common and may be due to an infection with the same strain or a different strain of *C. difficile*. A proportion of patients may have multiple recurrences. Recurrence is not thought occur because of resistance to vancomycin, but because of the disturbance of normal gut flora. For management of relapsed/recurrent infection please discuss with Microbiology.

Approx. 20% of patients relapse, due to:

Germination of residual spores

Re-infection

Further antibiotics

4.6.1. Risk factors for relapse.

Increased risk:

Age

Poor mobility

4.6.2. Diagnosis of relapse

To diagnose relapse:

Clinical symptoms / condition

Inflammatory markers

Abdominal x-ray

Flexible sigmoidoscopy

4.6.3. Management of recurrent CDI

Specialist advice from Microbiology should be sought for **all** cases of presumed recurrent or relapsed CDI.

4.7. Alternative treatments and probiotics

4.7.1. Intracolonic vancomycin

Given as a retention enema: vancomycin 500mg in 100-500ml saline 4-12 hourly. This can be administered either by an 18-gauge Foley catheter with 30ml balloon inflated per rectum or via a Flexi-Seal® device if already in use. Vancomycin should be instilled, the catheter then clamped for 60mins and then deflated and removed. If using Flexi-Seal® device, the volume instilled should be allowed to drain after clamping for 60 minutes.

4.7.2. Fidaxomicin

Is equally effective in treating a first case of CDI as standard oral vancomycin. It should be considered in patients who have relapsed despite oral vancomycin or who are considered very high risk for relapse disease at initial diagnosis. Microbiology will advise if the patient is a candidate for Fidaxomicin based on clinical information at the time of a new positive *C. difficile* result.

4.7.3. Vancomycin tapering course

For patients who have on-going symptoms despite treatment with either the standard oral vancomycin or Fidaxomicin course, and for whom faecal transplant is not immediately available, tapering course vancomycin can be considered. Microbiology advice should be sought in these cases.

Vancomycin tapering course – to be used when recommended by a medical microbiologist or infectious diseases physician.

Start Vancomycin 250mg QDS.

If responds by day 5 then continue 14 days

Then:

125mg QDS for 1 week
125mg TDS for 1 week
125mg BD for 1 week
125mg OD for 1 week
125mg every other day for 2 weeks
125mg every 3rd day for 2 weeks

4.7.4. Faecal transplant

Also termed ‘donor faces infusion’ or ‘human probiotic infusion’, this treatment should be considered for patients who have had 2 or more episodes of confirmed *C. difficile* associated diarrhoea which has been refractory to standard drug treatment.

Typically, fresh faeces from a healthy donor are administered in normal saline by enema or slurry via nasogastric tube or colonoscopy. This treatment modality is currently available locally, (via the FMT service run through the University Hospital Birmingham). Faecal transplant should be arranged through Infectious Diseases with support from Microbiology.

4.7.5. Probiotics

There is currently a lack of robust research data to inform which probiotics are most efficacious for treatment or prevention of antibiotic associated diarrhoea and CDI. Their use for prevention of CDI is not currently recommended in national guidance.

4.7.6 Bezlotoxumab

Bezlotoxumab is a human monoclonal antitoxin antibody. It binds to *Clostridioides difficile* toxin B and neutralises its activity, preventing recurrence of *C.difficile* infection.

Please note however, Nice guideline (NG 199) states that bezulotoxumab should NOT be offered to prevent recurrence of *C.difficile* because it is **NOT** cost effective. It is not currently licensed for use in the UK.

4.8. Standard Infection Control Precautions (SICPs) and Transmission Based Precautions (TBPs)

Standard infection control precautions (SICPs) as per the National Infection Prevention and Control Manual (NIPCM) (2022) are to be used **by all** staff, **in all** care settings, **always**, **for all** patients whether infection is known to be present or not, to ensure the safety of those being cared for, staff and visitors in the care environment.

Transmission based precautions (TBPs), specifically contact precautions, as per the NIPCM (2022) should be applied in addition to SICPs whilst a patient symptomatic with CDI/confirmed CDI is being nursed within the care environment.

Summary of key precautions:

a) After the first diarrhoeal stool, transfer to a single room.
b) Isolation should be secured within 4 hours in line with INF-045 appendix 1. In some circumstances, cohort nursing may need to be considered – this decision will need to be in liaison with the IPCT.
c) Contact precautions sign to be affixed to the outer door of the single room.
d) Patient should be provided with a designated toilet or commode.
e) Disinfection of the designated toilet should be in accordance with the trust cleaning policy using proprietary bleach-based cleaner or other appropriate alternative.
f) Disinfection of a commode should be with detergent wipes and once daily with a sporicidal agent if the commode is designated to the affected patient. If the commode needs to go back into general use, disinfection with a sporicidal agent is required immediately after use before its use with the next patient.
g) Appropriate PPE must be worn when handling bedpans/excreta.
h) Visitors should be instructed to wear an apron when entering the patient's room. Gloves are only required if they are assisting in providing direct patient care.
i) Staff/visitors should wash hands with **soap and water** after attending a patient with diarrhoea and exiting the room. After exiting the room, hands should be disinfected with an alcohol-based hand rub.
j) All linen should be treated as 'infected'.
k) Housekeeping/Domestic services should be notified to arrange enhanced daily isolation/barrier room cleaning.

4.9. Removal from isolation and terminal cleaning

Patients are considered non-infectious once they have passed formed stool (i.e. Bristol Stool Chart types 1-4) for ≥48 hours.

Once vacated, the room should be HPV cleaned prior to the use by another patient.

4.10. Information for Patients and Carers

All toxin or PCR positive patients identified during an inpatient stay will be provided with a patient information leaflet (WAHT-PI-0033).

All toxin positive patients identified during an inpatient stay will be provided with a patient letter, GP letter and C. *difficile* passport. The C. *difficile* passport can be shown by the patient upon future contact with any healthcare providers.

4.11. Hotspot

A Hotspot is defined as 2 or more PCR cases or a toxin-positive case and a PCR case that occurs ≥ day 3 from admission on the same ward in a 28-day period. Or an admission positive toxin or PCR followed by a PCR or toxin case that occurs ≥ day 3 from admission on the same ward in a 28-day period.

Detection of a Hotspot triggers consideration of ribotyping depending on epidemiological factors and enhanced monitoring in the affected area.

4.12. Period of Increased Incidence (PII)

A period of increased incidence (PII) is defined as 2 or more attributable toxin-positive cases, e.g. HOHA or COHA cases, that occur in (or are linked to) the same ward in a 28-day period. Detection of a PII triggers additional IPCT and antimicrobial stewardship auditing and enhanced monitoring on the affected ward area, plus ribotyping and a rolling HPV clean.

4.13. Outbreak

An outbreak is defined as 2 or more toxin positive cases on the same ward, linked in time and place and are confirmed to have the same ribotype.

If this occurs, the policy for outbreak reporting and control (WAHT-INF-044) will be followed and further MLVA fingerprinting requested. A multidisciplinary incident meeting will subsequently be held, chaired by the Director of Infection Prevention and Control (DIPC) or their nominated deputy.

Outbreaks of *C. difficile* are reportable as Serious Incidents.

4.14. Post Infection Review (PIR)

To examine the effectiveness of measures implemented and learn any lessons to improve patient safety, each case of Trust-attributable CDI will be reviewed.

4.14.1. Review Process

Review of all cases must take place:

- For hospital-onset hospital-acquired (HOHA) cases a rapid review within 72 hours at clinical level to identify any immediate actions to be taken. This will often be in discussion with the Infection Prevention Team and Ward Pharmacist as part of case management discussions and will usually include IPCT audit of standards.
- For both HOHA and community-onset hospital-acquired (COHA) cases, formal review and sign-off within 1 month of the case at divisional level, including action plans. Monitoring of completion of action plans is the responsibility of the Divisional Management Team.

- Formal review and sign-off of lapse in care data via the Trust Infection Control Committee (TIPCC) Scrutiny & Learning within 1 month of the end of the quarter in which the case occurs.

A final decision as to lapse in care is made in agreement with the DIPC, Senior Infection Control Nurse team, Consultant Microbiologist, and Infection Control lead for the CCG via the TIPCC Scrutiny and Learning Meeting.

4.14.2. Lapse in Care

The following will be considered to determine if there was a lapse in care:

- Were there any aspects of the patient's care that could have been done differently?
- Identification of failures in policy and procedures which directly contributed to the CDI case (i.e. failure to follow Trust Antibiotic policy or poor environmental cleaning)
- Failures in policy and procedures which although did not directly contribute to the CDI, had an impact on the patient care delivery (i.e. failure to isolate patient on identification of diarrhoea)

4.14.3. Categorisation

The following categories will be assigned to the case based upon the final decisions made in TIPCC Scrutiny and Learning.

No Lapses in Care
Lapse in Care did NOT contribute to development of CDI
Lapse in care contributed to development or acquisition of CDI

4.15. Audit Mechanism and Surveillance

All cases will be notified to clinical areas by phone on the day of the positive laboratory report. The cumulative numbers of cases in all areas are published widely: on the Trust intranet, on the Corporate Systems Trust Performance Nursing Report, and communicated to the management boards of both hospital sites monthly.

For all *C. difficile* Toxin positive cases, the Infection Prevention and Control will undertake auditing of the ward area concerned. Auditing will review both the environment and practice on the ward.

All deaths where *Clostridiodes difficile* is mentioned on Death Certificate in 1a, 1b or 1c will be reported as Serious Incidents (SIs) following the Trust process for all SI reporting.

Before citing *C difficile* as a cause of death, the case must be discussed with a senior clinician and the duty microbiology team should be informed.

All cases of CDI will be logged on password protected internal log sheets and reported to the secure UK Health Security Agency (UKHSA) HCAI database.

Cases where the patient dies will also be reported to the Integrated Care Board (ICB) as an SI.

Responsibility for maintaining the log sheets lies with the Directorate Support Officer, who obtains the data from the laboratory information system and ICNet software.

In addition, if surveillance of *C. difficile* 30day all-cause mortality indicates a rate approaching 20%, a review is undertaken of a selection of the cases to ensure that management of *C. difficile* in these cases was optimal and the review process was optimal.

5. Implementation of key document

5.1. Plan for implementation

5.2. Dissemination

5.3. Training and awareness

CDI will be included in induction training for doctors and nurses, and regular updates will be delivered as part of the annual programme of the Infection Prevention and Control Department.

6. Monitoring and compliance

Page/ Section of Key Document	Key control:	Checks to be carried out to confirm compliance with the policy:	How often the check will be carried out:	Responsible for carrying out the check:	Results of check reported to: *(Responsible for also ensuring actions are developed to address any areas of non-compliance)*	Frequency of reporting:
	WHAT?	**HOW?**	**WHEN?**	**WHO?**	**WHERE?**	**WHEN?**
	PIRs of all Trust Attributable *C.difficile* Toxin positive cases	In-depth review of all *C. difficile* toxin positive cases diagnosed on day 3 of admission where day of admission is day 1 to Acute Trust. This review will consider the following key factors: Antimicrobial use against Trust policy, Timeliness of sampling/diagnosis, environmental cleanliness (review of environmental and ward IPC practice audit data)	As cases are identified	CMM, Lead IPCN/deputy, ICB IPC lead	TIPCC Scrutiny & Learning	Monthly
	Identification of Periods of Increased Incidence (PII) and outbreaks	Through review of all *C. difficile* cases at the weekly IPCT meeting and automated flagging of C. difficile cases (both toxin positive and PCR positive) on the same ward areas via ICNET	Weekly	IPCT	TIPCC Scrutiny & Learning	Monthly
	Antibiotic stewardship audits (prescribing and review)	Undertaken under the lead of the Trust Antimicrobial pharmacist by ward pharmacists	When PII identified	Trust Antimicrobial Pharmacist and CMM	TIPCC Scrutiny & Learning	Monthly (as and when PIIs identified

7. Policy review

To be reviewed every 3 years or when a new version of the NICE Guidance is published.

8. References

Department of Health: Health and Social Care Act 2008: Code of practice on the prevention & control of infections 2015

Department of Health/Health Protection Agency: *Clostridioides difficile* infection. How to deal with the problem (2008) Last updated 6 Sept 2019 Available at: **https://assets.publishing.service.gov.uk/media/5a7edda9e5274a2e8ab48b25/Clostridium_difficile_infection_how_to_deal_with_the_problem.pdf**

Department of Health: Updated guidance on the diagnosis and reporting of *C.difficile* (2012)

Public Health England (PHE): Updated guidance on the management and treatment of Clostridioides difficile infection (2013)

WHO five moments of Hand hygiene

Worcestershire Acute Hospitals Trust Antimicrobial prescribing policy

National Infection Prevention and Control Manual (2022) https://www.england.nhs.uk/national-infection-prevention-and-control-manual-nipcm-for-england/ [Accessed 09.02.2024]

NICE guideline NG199 (2021): published 23rd July 2021. www.nice.org.uk/guidance/ng199. Accessed 25th October 2021 and 24th April 2024

9. Background

9.1. Equality requirements

Further information available in the findings of the equality impact assessment (Supporting Document 1)

9.2. Financial Risk Assessment

There are no financial risks associated with this policy.

Further information available in the findings of the financial risk assessment (Supporting Document 2)

9.3. Consultation Process

Key individuals involved in updating the document

Name	Designation
Lara Bailey	Senior Infection Prevention and Control Nurse Advisor
Kerrie Howles	Senior Infection Prevention and Control Nurse Advisor
Dr Emma Yates	Consultant Microbiologist and Infection Control Doctor

Circulated to the following individuals for comments

Name	Designation
Dr Eftihia Yiannakis	Consultant Microbiologist and Infection Control Doctor
Dr Mary Ashcroft	Consultant Microbiologist
Dr Hugh Morton	Consultant Microbiologist and AMS lead
Dr Mark Roberts	Consultant in Infectious Diseases
Julie Booth	Deputy Director for Infection Prevention and Control
	All members of the Infection Prevention and Control Team

Circulated to the following CDs / Heads of department for comments from their directorates / departments

Name	Directorate / Department

Circulated to the chair of the following committees / groups for comments

Name	Committee / Group
Sarah Shingler	Trust Infection Prevention & Control Committee
Tania Carruthers	Medicines Safety Committee

9.4. Approval Process

The final draft will be checked to ensure it complies with the correct format and that all supporting documentation has been completed.

The policy will be submitted to TIPCC for approval before document code and version number are confirmed and the policy is released for placement on the Trust intranet.

Appendices

Supporting Documents

Supporting Document 1 Equality Impact Assessment
Supporting Document 2 Financial Risk Assessment

Supporting Document 1 - Equality Impact Assessment Tool
To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

NHS Worcestershire Acute Hospitals NHS Trust

Herefordshire & Worcestershire STP - Equality Impact Assessment (EIA) Form
Please read EIA guidelines when completing this form

Section 1 - Name of Organisation (please tick)

Herefordshire & Worcestershire STP		Herefordshire Council		Herefordshire CCG	
Worcestershire Acute Hospitals NHS Trust	x	Worcestershire County Council		Worcestershire CCGs	
Worcestershire Health and Care NHS Trust		Wye Valley NHS Trust		Other (please state)	

Name of Lead for Activity	**Julie Booth – Deputy DIPC**

Details of individuals completing this assessment	**Name**	**Job title**	**e-mail contact**
	Lara Bailey	**Senior Infection Prevention and Control Nurse Advisor**	**larabailey@nhs.net**
Date assessment completed	**09.02.2024**		

Section 2

Activity being assessed (e.g. policy/procedure, document, service redesign, policy, strategy etc.)	**Title: Policy (Document)** Policy for the Management of Clostridiodes difficile infection and Transmission Prevention.
What is the aim, purpose and/or intended outcomes of this Activity?	This policy provides guidance on informing health professionals about C difficile which may pose a risk for spread of infection, and for which control measures may be necessary.

Who will be affected by the development & implementation of this activity?	❑ Service User ❑ Patient ❑ Carers ❑ Visitors		❑	Staff
Is this:	❑ Review of an existing activity			
What information and evidence have you reviewed to help inform this assessment? (Please name sources, eg demographic information for patients / services / staff groups affected, complaints etc.	National Guidance			
Summary of engagement or consultation undertaken (e.g. who and how have you engaged with, or why do you believe this is not required)	Key stakeholders have been engaged through the circulation of this policy prior to ratification being undertaken.			
Summary of relevant findings	No findings.			

Section 3

Please consider the potential impact of this activity (during development & implementation) on each of the equality groups outlined below. **Please tick one or more impact box below for each Equality Group and explain your rationale**. Please note it is possible for the potential impact to be both positive and negative within the same equality group and this should be recorded. Remember to consider the impact on e.g. staff, public, patients, carers etc. in these equality groups.

Equality Group	Potential positive impact	Potential neutral impact	Potential negative impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Age		x		
Disability		x		
Gender Reassignment		x		
Marriage & Civil Partnerships		x		
Pregnancy & Maternity		x		

Equality Group	Potential positive impact	Potential neutral impact	Potential negative impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Race including Traveling Communities		x		
Religion & Belief		x		
Sex		x		
Sexual Orientation		x		
Other Vulnerable and Disadvantaged Groups (e.g. carers; care leavers; homeless; Social/Economic deprivation, travelling communities etc.)		x		
Health Inequalities (any preventable, unfair & unjust differences in health status between groups, populations or individuals that arise from the unequal distribution of social, environmental & economic conditions within societies)		x		

Section 4

What actions will you take to mitigate any potential negative impacts?	Risk identified	Actions required to reduce / eliminate negative impact	Who will lead on the action?	Timeframe
How will you monitor these actions?				

When will you review this EIA? (e.g in a service redesign, this EIA should be revisited regularly throughout the design & implementation)	When the policy requires revision in 3 years or if new guidance is published sooner.

Section 5 - Please read and agree to the following Equality Statement

1. Equality Statement

1.1. All public bodies have a statutory duty under the Equality Act 2010 to set out arrangements to assess and consult on how their policies and functions impact on the 9 protected characteristics: Age; Disability; Gender Reassignment; Marriage & Civil Partnership; Pregnancy & Maternity; Race; Religion & Belief; Sex; Sexual Orientation
1.2. Our Organisations will challenge discrimination, promote equality, respect human rights, and aims to design and implement services, policies and measures that meet the diverse needs of our service, and population, ensuring that none are placed at a disadvantage over others.
1.3. All staff are expected to deliver services and provide services and care in a manner which respects the individuality of service users, patients, carer's etc, and as such treat them and members of the workforce respectfully, paying due regard to the 9 protected characteristics.

Signature of person completing EIA	Lara Bailey
Date signed	09.02.2024
Comments:	
Signature of person the Leader Person for this activity	
Date signed	09.02.2024 J Booth
Comments:	

Supporting Document 2 – Financial Impact Assessment

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

	Title of document:	Yes/No
1.	Does the implementation of this document require any additional Capital resources	No
2.	Does the implementation of this document require additional revenue?	No
3.	Does the implementation of this document require additional manpower?	No
4.	Does the implementation of this document release any manpower costs through a change in practice	No
5.	Are there additional staff training costs associated with implementing this document which cannot be delivered through current training programmes or allocated training times for staff.	No
	Other comments:	

If the response to any of the above is yes, please complete a business case and which is signed by your Finance Manager and Directorate Manager for consideration by the Accountable Director before progressing to the relevant committee for approval.