The Royal Wolverhampton NHS Trust

IP06
Prevention, Control and Management of *Clostridioides difficile*

Contents

Attachments

1.0 Policy Statement (Purpose / Objectives of the policy)

The prevention and control of *Clostridioides difficile* infection (CDI) in the Royal Wolverhampton NHS Trust is a high priority as part of the Trust's Integrated Governance and Patient Safety Strategies. This is monitored by the adherence to standards set out by the NHS Resolution, the Care Quality Commission and the Health Act 2012. Therefore, arrangements for the organisation of infection prevention and control within the Trust need to be clear. This policy must be read in conjunction with the current Infection Prevention Strategy.

The policy will identify the position of the infection prevention and control function within the organisational structure and the operational systems and assurances which are in place in order to ensure that infection prevention and control is facilitated and communicated within the Trust. The policy will outline surveillance priorities for the Trust and ensure that an annual programme of work is developed that includes an audit programme and an educational plan. The policy will identify the process of management of Health Care Associated Infection (HCAI) statistics available to the general public and identify the investigation process for specific infections.

In adhering to this Policy, all applicable aspects of the Conflicts of Interest Policy must be considered and addressed. In the case of any inconsistency, the Conflict of Interest Policy is to be considered the primary and overriding Policy

2.0 Definitions

Bay	An area within a ward, housing a small number of patients.
Colonisation	A long term relationship in which a micro-organism lives on (or in) a host, without any adverse reaction by the host to its presence.
Diarrhoea	Soft/Liquid stool. Usually type 5-7 when referring to the Bristol Stool Chart.
Epidemiology	The scientific study of the spread and control of disease.
Healthcare Associated Infection	Often abbreviated to HCAI. Infection not present or incubating at the time admission to a healthcare environment. In most circumstances, an infection that manifests more than 48 hours after admission is regarded as an HCAI or from care delivered whilst in a community setting.
Infection	The outcome of an interaction between a host and a micro-organism in which the host reacts in an observable way. The evidence is usually a clinical infection.
Outbreak of *Clostridioides difficile* Infection (CDI)	Two or more cases related in time and place within a 28 day period.
Serious Incident (SI) **Period of Increased Incidence (PII)**	2 cases of EIA toxin positive attributed to the same ward within 28 days with proven transmission by enhanced testing (externally reportable). 2 possibly related positives attributed to the same ward within 28 days with proven transmission by enhanced testing (externally reportable).
Trust Antimicrobial Stewardship Group	An antibiotic pharmacist, a microbiologist (and a clinician if deemed necessary on a case by case basis) whose remit is to review the antimicrobial policy and guidelines.
Ward	An identified area within the Trust, housing in-patients.

3.0 Accountabilities

3.1 The Infection Prevention Team

3.1.1 Maintain and communicate accurate surveillance data.
3.1.2 Update this policy to reflect current guidance.
3.1.3 Provide support on the implementation of this policy.
3.1.4 Alert staff to the need to implement additional actions to prevent / contain an outbreak.
3.1.5 Co-ordinate the management of an outbreak / PII and associated actions.
3.1.6 Co-ordinate a local Incident Review Meeting for 2 cases of PCR CDI in a period of 28 days, and reporting this incident via the Trust Incident Reporting System.
3.1.7 Report CDI outbreaks, incidents and related deaths via the Trust incident reporting system.
3.1.8 Identify and manage cases of community attributable CDI and investigating pre 48 hour positive specimens on admission to RWT, through a comprehensive standard data collection process (Wolverhampton GP patients only).
3.1.9 Follow up cases of *Clostridioides difficile* in the community (Wolverhampton GP patients only) to ensure safe management of the disease (see also 4.3.3).
3.1.10 Liaise with the Black Country Integrated Care Board (BCICB) on the determination of avoidable and unavoidable cases of CDI.
3.1.11 Send avoidability outcome data to the BCICB on a monthly basis for scrutiny.
3.1.12 Communicate the avoidability data on a monthly basis, to internal stakeholders.

3.2 Consultant Medical Staff

3.2.1 Review antibiotics on every ward round and educate junior medical staff in good antibiotic stewardship.
3.2.2 Review Proton Pump Inhibitor (PPI) usage on every ward round, discontinuing use wherever possible and educating junior medical staff on the link between PPI use and CDI.
3.2.3 Ensure that patients with CDI in their care are managed according to the Treatment and Referral Algorithm, with CDI being treated as a diagnosis in its own right.
3.2.4 Promote excellent infection prevention practices such as hand hygiene.
3.2.5 Maintain a high index of suspicion of CDI and initiate treatment prior to positive stool result.
3.2.6 Prevent any delays in commencing treatment for CDI, including ensuring the first dose of CDI therapy is given as a stat dose where necessary.
3.2.7 Discuss with a Consultant Microbiologist patients likely to have CDI on Part 1 of the death certificate prior to the completion of the death certificate.
3.2.8 Undertake Root Cause Analysis (RCA) on the cases of deceased patients in their care with CDI on Part 1 of the death certificate.

3.3 Divisional Managers/ Divisional Heads of Nursing and Midwifery

3.3.1 Make contingency arrangements as required to maintain activity during outbreaks.

3.3.2 Ensure the clinical environment is maintained to the highest standard to prevent environmental contamination and to minimise the risk of spread.

3.3.3 Facilitate recommendations from incident/ outbreak meetings.

3.4 Matrons/Senior Sisters/Charge Nurses/ Departmental Managers

3.4.1 Ensure that staff members in their area are aware of and follow this policy.
3.4.2 Facilitate education on the content of this policy.
3.4.3 Report any breaches to this policy via the Trust's incident reporting system and directly to the Infection Prevention Team.
3.4.4 Alert the Infection Prevention Team to any potential outbreaks of infection.
3.4.5 Contribute to root cause analyses of clusters of CDI and deaths relating to CDI where applicable.
3.4.6 Ensure the completion of the annual deep clean programme.

3.5 Nursing staff

3.5.1 Alert to and documenting the identified increased risk of CDI.
3.5.2 Assess other risk factors for CDI, to include:
- Current antibiotic therapy (stop date must be identified)
- Recent antibiotic therapy within the last 6/52

3.5.3 Provide hand wipes or hand washing facilities for patients to use prior to eating and taking medication and encouraging hand washing after using the toilet.
3.5.4 Routinely document stool habits on a stool chart (Attachment 4) and on Vitals, the Trust's electronic patient clinical monitoring system.
3.5.5 Ensure the patient environment is clutter free and decontaminated to the appropriate specification. Patient equipment must also be decontaminated as per the Trust Cleaning Delivery Plan
3.5.6 Remove damaged items of furniture from the clinical area which may become a vehicle for the spread of CDI.
3.5.7 Facilitate the annual deep clean programme

3.6 Junior Medical Staff

3.6.1 Review antimicrobials daily and ensure that these are prescribed in accordance with the Trust Antimicrobial Policy.

3.6.2 Review PPI usage on every ward round, discontinuing use wherever possible and educate other staff on the link between PPI use and CDI.

3.6.3 Ensure that patients with CDI in their care are managed according to the Trust Treatment Algorithm, with CDI being treated as a diagnosis in its own right.

3.6.4 Monitor the patient's stool habit daily using the stool chart and Vitals
3.6.5 Promote and engage in excellent infection prevention practices such as hand hygiene.
3.6.6 Maintain a high index of suspicion of CDI and initiate treatment prior to a positive stool result.
3.6.7 Prevent any delays in commencing treatment for CDI, including ensuring the first dose of CDI therapy is given as a stat dose where necessary.
3.6.8 Discuss with a Consultant Microbiologist patients likely to have CDI on Part 1 of the death certificate prior to the completion of the death certificate.
3.6.9 Contribute to RCA on the cases of deceased patients in their care with CDI on Part 1 of the death certificate.
3.6.10 Stop any inappropriate medication such as aperients.

4.0 Policy Detail

4.1 Prevention of CDI

4.1.1 The guidelines provided in (Attachment 1) detail the infection prevention precautions required to prevent the spread of CDI.
4.1.2 Detailed, accurate and fit for purpose surveillance systems will be used to monitor CDI rates and cases in all clinical areas (Attachment 2).
4.1.3 Regular maintenance of the environment will be delivered, including the provision of domestic services, in accordance with the minimum standards of the National Cleaning Standards and at least annual deep clean of inpatient areas including either steam, hydrogen peroxide vaporisation or a suitable, Infection Prevention Team agreed alternative.
4.1.4 Ward / department equipment (including commodes) must be kept clean and dust free at all times, and cleaned with an appropriate product to eradicate the organism.
4.1.5 Antimicrobial Prescribing Guidelines must be followed and must be observed at all times.
4.1.6 Antimicrobial prescribing guidelines will be maintained and updated at least bi-annually. Any deviances from the antimicrobial prescribing guidelines must be justifiable and this justification recorded in the healthcare record.
4.1.7 Patients identified with CDI will be monitored (as a minimum) on a weekly basis via a 'CDI ward round' comprising of a Consultant Microbiologist, Infection Prevention Nurse and where possible, a member of the ward team. The purpose of the ward round is to support appropriate and effective CDI patient management and to prevent spread of the organism through advice and support to clinical areas. Information gathered during the ward round is relayed to clinicians/ clinical areas as per the CDI Standard Operating Procedure (SOP) see IP08

4.2 Identification of patients with CDI

4.2.1 Clinicians (doctors and nurses) must apply the following mnemonic protocol (SIGHTED) when managing suspected potentially infectious diarrhoea.

S		Suspect that a case may be infective where there is no clear alternative cause for diarrhoea.
I		Isolate the patient and consult with the Infection Prevention Team (IPT) 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 must be carried out before and after each contact with the patient and the patient's environment.
T		Test the stool for CDI, by sending a specimen immediately.
E		Educate the patient and others to promote recovery and minimise the risks of transmission.
D		Document patient care, including starting a stool chart, monitoring hydration and nutrition.

4.2.2 The Bristol Stool Chart see (Attachment 3) must be used for the assessment of severity of all diarrhoea and a type documented (1-7) using the approved stool chart (Attachment 4).

4.2.3 CDI must be suspected and a stool specimen sent to the microbiology laboratory when:

- A patient experiences diarrhoea following a dose or recent course of antibiotic;
- A patient experiences diarrhoea with liquid stools (type 5-7) **for no explained reason**;
- An endoscopy shows clinical evidence of pseudomembranous colitis.

4.2.4 Repeated stool specimens are not necessary to confirm suspected relapse of infection within 4 weeks of the initial infection.

4.2.5 Guidelines on the prevention of spread of CDI are provided in (Attachment 5).

4.2.6 The *Clostridioides difficile* Management Algorithm must be instigated as soon as CDI is **suspected** (Attachment 6).

4.2.7 Written patient information on CDI must be provided and is available from the Medical Illustration Department WCA1498.

4.2.8 The General Practitioner of a patient with CDI must be notified of the infection by letter, usually within 48 hours or next working day after the result, in cases identified from GP specimens. This will normally be done by the Infection Prevention Team. For those patients diagnosed in the community, via a GP generated stool specimen, the patient/GP will be verbally contacted on the day of result to advise and to request treatment as per the CDI Community Treatment Algorithm (Attachment 6).

4.3 Treatment of CDI

4.3.1 The treatment and referral flow chart pathway provided (Attachment 6) must be followed as soon as CDI is suspected, utilising the appropriate algorithm for the patient's location (hospital or community setting).

4.3.2 Patients within a hospital setting will be assessed by a Consultant Microbiologist and an Infection Prevention Nurse on identification of CDI and additional advice provided to clinical areas regarding required treatment.

4.3.3 For patients who are registered with a Wolverhampton GP, telephone contact will be made by the Infection Prevention Team on the day of result, followed by a letter and patient literature. Weekly contact will be made thereafter using the CDI community care plan until resolution of symptoms or support no longer required (usually a 4-week period).

4.3.4 For patients with a non-Wolverhampton GP, the Infection Prevention Team within the respective area will be notified on patient discharge.

4.3.5 On-going management of CDI will be the responsibility of the clinical areas, with support from a Consultant Microbiologist and IPN during the weekly CDI ward round. Information gathered during the ward round is relayed to clinical areas as per the CDI SOP in IP08.

4.4 Transfer / discharge of patients with CDI or history of CDI

4.4.1 All destination areas must be informed in advance of patients with any history of CDI during their admission, treatment received and the success of that treatment and current symptoms.

4.4.2 All transfers and discharges must be accompanied with documentation detailing the dates of symptoms, dates of stool specimens and results, treatment received for CDI and any infection prevention precautions still necessary.

4.4.3 Following discharge or transfer, the procedure for terminal clean of an infected area must be followed see (Operational Cleaning Plan) and the bed-space checklist must be completed (Attachment 10). Hydrogen Peroxide Vapour is the preferred method of terminal cleaning on discharge.

4.4.4 Patients discharged from the hospital setting will be managed by the Infection Prevention Team for follow up (if registered with a Wolverhampton GP), as per the CDI community care plan. This aims to prevent recurrence of disease and to improve the patient experience and outcomes.

4.5 Outbreaks of CDI

4.5.1 Outbreaks may be suspected by the Infection Prevention Team in response to surveillance data or by the clinical team.

4.5.2 PII must be managed by the clinical lead, Matron, Senior Sister, Charge Nurse and departmental manager with assistance from the Infection Prevention Team and progress fed back via the divisional report to the Infection Prevention and Control Group. A Director must chair the PII meeting.

4.5.3 All outbreaks must be managed as per the Trust Outbreak of

Communicable Infection Policy (IP13).

4.5.4 Specific actions which may be taken in the event of a PII or an outbreak of CDI are listed in (Attachment 7).

4.5.5 Outbreaks or potential links of CDI cases in Nursing/Residential Homes across the City will be identified/ managed by the Infection Prevention Team in collaboration with BCICB/ UK Health Security Agency (UKHSA) and owners/managers of the care home.

4.6 Investigation of cases

4.6.1 A standard data set will be collected for single cases of CDI as outlined in the CDI Standard Operating Procedure (SOP) – see IP08.

4.6.2 Cases where death is attributed to CDI (Part 1a on the death certification) will automatically be graded as a red incident and require an RCA according to the (OP10 Risk Management and Patient Safety Reporting Policy, Protocol 2) and escalated accordingly.

4.6.3 Cases where CDI has been reported as a contributory cause of death (Parts 1b and 1c on the death certification) and the decision has been agreed with the Consultant Microbiologist, will require incident reporting and internal investigation.

4.6.4 Action plans arising from RCAs must be assigned to an individual and progress reported to the Infection Prevention and Control Group (IPCG) through divisional representation detailing the case definition and actions required to prevent further outbreaks.

4.7 Death Certification

4.7.1 All medical staff members have a legal duty to report CDI on a death certificate if it contributed to, or caused a death see (Attachment 8) for guidance.

4.7.2 All instances where death certification is likely to list CDI as Part 1 (primary or contributory cause of death) must be discussed with a Consultant Medical Microbiologist prior to issue of the death certificate.

4.7.3 CDI related deaths (Parts 1a, 1b or 1c) in community settings (including nursing and residential care homes) or as pre 48 hour specimens on admission to the acute trust, will be reported as a Serious Incident (SI) via BCICB and an RCA completed. The RCA and action plan will be reported to the Commissioners within the appropriate timeframe.

5.0 Financial Risk Assessment

1	Does the implementation of this policy require any additional Capital resources	No
2	Does the implementation of this policy require additional revenue resources	No
3	Does the implementation of this policy require additional manpower	No
4	Does the implementation of this policy release any manpower costs through a change in practice	No
5	Are there additional staff training costs associated with implementing this policy which cannot be delivered through current training programmes or allocated training times for staff.	No
	Other comments There are no additional financial requirements for the implementation of this policy.	

6.0 Equality Impact Assessment

There are no adverse effects of this policy to any specific ethnic or diverse group.

7.0 Maintenance

The Infection Prevention Team will be responsible for the maintenance and review of this policy in accordance with national guideline and best practice at least every 3 years.

8.0 Communication and Training

8.1 Training in this policy will be provided by the Infection Prevention Team via existing mandatory update sessions.

8.2 Changes to the policy will be widely promoted through the organisation.

8.3 The revised policy will be available on the Trust Intranet.

9.0 Audit Process

Criterion	Lead	Monitoring method	Frequency	Committee/ Group
Audit compliance with CDI policy	Infection Prevention Team	Data collection and analysis by Infection Prevention Team utilising ICNet as the surveillance software system	Monthly	Infection Prevention and Control Group (IPCG)
5 Moments of Hand Hygiene	Clinical areas/ Divisions	Data inputted into the designated electronic audit system and reported to IPCG	Monthly	IPCG

Key Performance Indicators

CDI numbers	Green-0 Amber - 1 Red - >1
Antimicrobial Prescriber Training compliance	Green - ≥95% Red - < 95%
Environmental technical audit results	Green 96% - 100% Amber 90% - 95.9% Red <90%

10.0 References - Legal, professional or national guidelines

Department of Health (2012) Updated guidance on the diagnosis and reporting of *Clostridioides* difficile; London; Department of Health

Department of Health (2008 revised 2015) Health Act: Code of Practice for the Prevention and Control of Healthcare Associated Infection; London; Department of Health.

Public Health England (2014 updated 2019) Clostridioides difficile: guidance, data and analysis: The characteristics, diagnosis, management, surveillance and epidemiology of Clostridioides difficile (C. difficile).

NHS Improvement (2019). *Clostridioides difficile* infection objectives for NHS organisations in 2019/20 and guidance on the intention to review financial sanctions and sampling rates from 2020/21; London; NHS Improvement

NHS England (2023) NHS Standard Contract 2023/24: Minimising Clostridioides difficile and Gram-negative bloodstream infections

Part A - Document Control

Policy number and Policy version: IP06 Version 8.0	**Policy Title** Prevention, Control and Management of *Clostridioides difficile*	**Status:** Final		**Author: Infection Prevention Nurse** **Director Sponsor: Chief Nursing Officer**
Version / Amendment History	Version	Date	Author	Reason
	1	July 2006	IP Lead Nurse	New Policy
	2	July 2008	IP Lead Nurse	Required revision
	3	October 2009	IP Lead Nurse	Reached stated review date
	4	September 2012	Infection Prevention Nurse	Reached stated review date
	5	January 2015	Nurse Manager Infection Prevention	Availability of two new treatment options, new reporting guidance and revision of SI reporting requirements/ death certificate arrangements
	5.1	August 2016	Nurse Manager Infection Prevention	Amendment to PII definition due to a lower tolerance
	6	February 2018	Nurse Manager Infection Prevention	Reached stated review date
	7	November 2020	Senior Infection Prevention Nurse	Reached stated review date
	8.0	January 2024	Senior Infection Prevention Nurse	Reached stated review date
Consultation Group / Role Titles and Date: Infection Prevention Team November 2020				

Consultant Microbiologists November 2020 Gastroenterologists November 2020	
Name and date of Trust level group where reviewed	IPCG Trust Policy Group – April 2024
Name and date of final approval committee	Trust Management Committee – April 2024
Date of Policy issue	May 2024
Review Date and Frequency (standard review frequency is 3 yearly unless otherwise indicated)	April 2027 (3 yearly)

Training and Dissemination:

The approved policy can be found on the Trust Intranet system.
Managers and Matrons will be informed of the launch and any revisions to the policy.
Basic Training will be provided on induction through the local induction process and via mandatory training sessions.
Enhanced (Level 2) training will be delivered on Nurse Induction training.
Further training will be arranged in response to audit findings

To be read in conjunction with:

OP10 Risk Management and Patient Safety Reporting Policy

Antimicrobial prescribing policy and guideline; RWT Intranet site

IP01 Hand Hygiene Policy; RWT Intranet site

IP13 Outbreaks of Communicable Infection Policy/Infection Prevention/ Serious Incident Policy; RWT Intranet site

IP12 Standard Precautions Policy; RWT Intranet site

Operational Cleaning Strategy: RWT Intranet site (Hotel Services departmental page)

Department of Health (2012) Updated guidance on the diagnosis and reporting of *Clostridioides difficile*; London; Department of Health

Department of Health (2008 revised 2015) Health Act: Code of Practice for the Prevention and Control of Healthcare Associated Infection; London; Department of Health

Department of Health (2009 updated 2019) CDI: How to deal with the problem; London; DH

Public Health England (2014 updated 2019) Clostridioides difficile: guidance, data and analysis: The characteristics, diagnosis, management, surveillance and epidemiology of Clostridioides difficile (C. difficile).

NHS Improvement (2019). *Clostridioides difficile* infection objectives for NHS organisations in 2019/20 and guidance on the intention to review financial sanctions and sampling rates from 2020/21; London; NHS Improvement.

Initial Equality Impact Assessment (all policies): Completed Yes / No Full Equality Impact assessment (as required): Completed Yes / No / NA If you require this document in an alternative format e.g., larger print please contact Policy Administrator 8904	
Monitoring arrangements and Committee	CDI dashboard presented to IPCG monthly outlining Trust policy compliance Trust wide annual audit; feedback to IPCG
Document summary/key issues covered. This policy will be implemented to reduce the risk of *Clostridioides difficile* infection (CDI) using a health- economy approach, when a single case or period of increased incidence of CDI is confirmed or suspected or when an outbreak of CDI is suspected. It contains attachments detailing specific management and preventative actions to take relating to CDI related deaths or clusters. This policy is devised to comply with The Health and Social Care Act (2008, rev. 2015) Code of Practice for health and adult social care on the prevention and control of infections and related guidance and Department of Health (2008) Guidance.	
Key words for intranet searching purposes	*Clostridioides difficile* CDI C. diff
High Risk Policy? **Definition:** • Contains information in the public domain that may present additional risk to the public e.g. contains detailed images of means of strangulation. • References to individually identifiable cases. • References to commercially sensitive or confidential systems. If a policy is considered to be high risk it will be the responsibility of the author and director sponsor to ensure it is redacted to the requestee.	**Yes / No (delete as appropriate)** If Yes include the following sentence and relevant information in the Intended Recipients section above – In the event that this is policy is made available to the public the following information should be redacted:

IP06 Attachment 1

Prevention of *Clostridioides difficile* Infection in all areas

Impact Assessments:

1.0 The physical condition of the environment must be monitored continuously by the Senior Sister/Charge Nurse/Departmental Manager. This includes:

- Cleanliness of the environment;
- Cleanliness of equipment;
- Unnecessary clutter;
- Wear and tear / damage to the environment / equipment.

2.0 Environmental audits must be undertaken monthly by the ward/departmental team, the results recorded on the Trust database and an action plan formulated for the non-compliances.

3.0 Hand Hygiene must be audited monthly using '5 Moments', and recorded on the Trust database. This performance data will be reported monthly by the Divisions to IPCG.

4.0 Any deficiencies noted from observations or audit of practice or the physical environment must be remedied as soon as possible.

5.0 Areas identified as at high risk of having patients with CDI must record this on the Directorate Risk Register with a suitable action plan. This includes:

- Gastroenterology;
- Critical Care areas;
- Acute Medical Unit;
- Surgical Emergency Unit;
- Haematology and Oncology.

6.0 Hand washing (not gel) must occur after all contact with patients with diarrhoea or their immediate environment.

7.0 The Standard Precautions Policy (IP12) must be adhered to consistently.

8.0 Antibiotics prescribed must be monitored daily (Mon-Fri) by a Pharmacist.

9.0 Incorrect prescribing of antibiotics must be recorded by the ward pharmacist and will be monitored by the Antimicrobial Stewardship Group and IPCG at least quarterly.

IP06 Attachment 2

Surveillance and reporting of *Clostridioides difficile* cases

1.0 Reporting

1.1 The Trust will report cases of *CDI* as per the latest Department of Health and Social Care guidelines

Result	Interpretation	Include in Mandatory Reporting
• GDH positive • PCR positive • toxin EIA positive	Toxigenic *C difficile* is present, so transmission potential. Patient is a *C difficile* excretor.	Yes
• GDH positive • PCR positive • toxin EIA negative	Toxigenic *C difficile* is present, so transmission potential. Patient is a *C difficile* excretor.	No
• GDH positive • PCR negative • toxin EIA negative	Toxigenic *C difficile* or CDI is very unlikely to be present, so does not have transmission potential. Patient could have other potential pathogens.	No
• GDH negative	*C difficile* not present. Patient could have other potential pathogens.	No

1.2 The Microbiology Laboratory will maintain a Standard Operating Procedure for *Clostridioides difficile* testing with a minimum standard consistent with current Department of Health and Social Care recommendations.

1.3 All diarrhoeal (types 5-7) stool samples received from inpatients over 2 years of age and community patients, if clinically indicated or specifically requested, must be tested for CDI.

2.0 Surveillance data

2.1 All individual reports of cases will clearly identify whether the case originated in hospital or community or if the individual affected had been in a hospital in the previous 12 weeks.

2.2 There must be continuous local surveillance of cases of CDI with monthly reporting to the following:

- Individual in-patient areas and divisions with trend analysis and easy detection of unusual event; this information must be shared and discussed at a directorate or divisional level at least monthly;
- Infection Prevention and Control Group (IPCG) with whole Trust and divisional trend analysis including any exceptional events;

- Trust Board.

2.3 Surveillance data to local areas and IPCG must include the number of patients with severe infection, number requiring surgical intervention and number of patients with CDI detailed as a cause of death.

2.4 A thorough investigation, using RCA, must be conducted into all cases of CDI related deaths within 30 days where the death is Part 1a on the death certificate See IP08. A thorough investigation using RCA must be conducted into all cases of CDI related deaths within 30 days where the death is Part 1b or 1c on the death certificate and where the Consultant Microbiologist has agreed that CDI was a contributory cause of death See IP08

3.0 Audit data

3.1 Monthly environmental audits must be conducted under the supervision of the Matron. Consideration must be given to cross-area auditing.

3.2 The auditing requirement of the national cleaning specification must be adhered to for the frequency of technical audits - please refer to the Trust's Cleaning Delivery Plan and Operational cleaning Plan

4.0 Reporting requirements

4.1 All outbreaks or PII of CDI will be reported as an incident via Datix by a lead member of the Infection Prevention Team investigating the situation. If the incident meets the definition of a Serious Incident, then this information will also be reported to UKHSA and the ICB via the Strategic Executive Information System (STEIS) by the relevant Divisional Governance Lead. The Chief Executive Officer or Director on–call out of hours will also be notified by the Director of Infection Prevention and Control (DIPC) or on-call microbiologist out of hours.

4.2 The Bereavement Office staff must inform the Infection Prevention Team of all incidences of CDI recorded on death certificates for appropriate further investigation.

4.3 Surgeons taking patients to theatre for operative procedures directly related to CDI must inform the DIPC. Out of hours, the on-call Consultant Microbiologist must be contacted.

4.4 A Consultant Microbiologist (on-call out of hours) must be consulted prior to the completion of a death certificate citing CDI as the primary cause or contributory cause of death (Part 1 on the death certificate).

IP06 Attachment 3

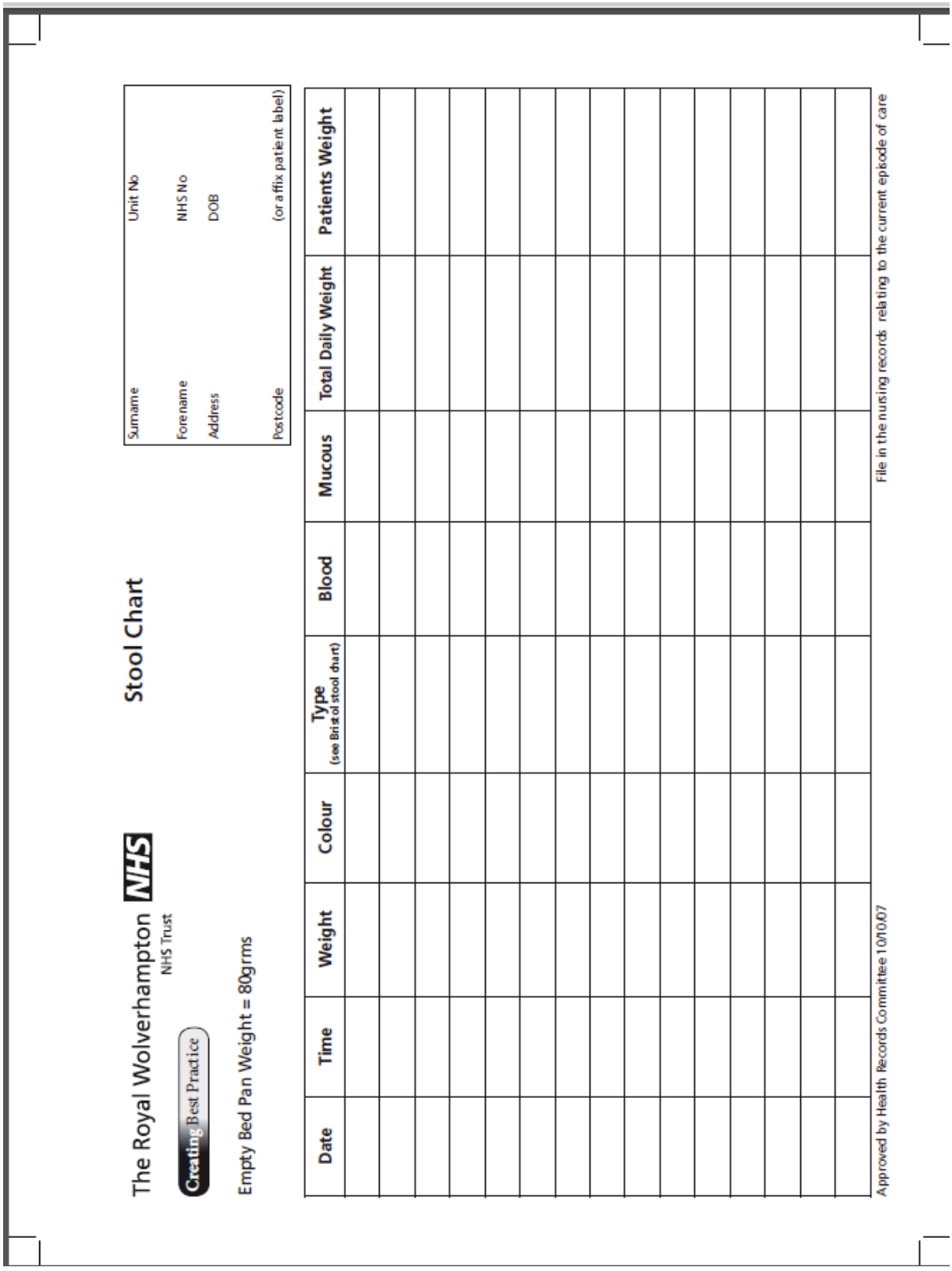
The Bristol Stool Chart

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

IP06 Attachment 4

Stool Record Chart

See following page also for High Impact Intervention (HII):



The Royal Wolverhampton NHS Trust

Creating Best Practice

Stool Chart

Surname | Unit No
Forename | NHS No
Address | DOB
Postcode | (or affix patient label)

Empty Bed Pan Weight = 80grms

Date	Time	Weight	Colour	Type (see Bristol stool chart)	Blood	Mucous	Total Daily Weight	Patients Weight

File in the nursing records relating to the current episode of care

Approved by Health Records Committee 10/10/07

IP06 Attachment 5

Prevention of spread of *Clostridioides difficile* from confirmed or suspected cases

1.0 Patients with unexplained diarrhoea, where there is no other explanation of cause, must be considered for CDI. Patients with **confirmed or suspected** CDI must be isolated in a single room as a matter of priority. Where no isolation facility is available the Infection Prevention Team must be informed. Isolation must continue until diarrhoea has been absent and a normal stool has been passed for at least 48 hours or the patient is discharged (whichever is sooner). If the patient is removed from isolation when more than 48 hours symptom free, the single room must be manually cleaned using a detergent product followed by Hydrogen Peroxide Vapour (HPV).

2.0 Hand washing (not gel) must occur following contact with the affected patient, their stools or environment and at all times during outbreaks of CDI.

3.0 Disposable gloves and aprons must be worn by health care workers for contact with affected patients, their stools or immediate environment.

4.0 Patients with confirmed or suspected CDI must have dedicated toilet / commode facilities.

5.0 All patients with suspected or confirmed CDI must have their stools monitored and documented using a stool chart.

6.0 Environmental cleaning must take place to the highest standard using a combined chlorine and detergent product.

7.0 Patients isolated due to CDI must be moved to a clean side room weekly whilst symptomatic. The vacated room must then be terminally cleaned using a combined detergent and chlorine product and the curtains changed as a minimum, followed by Hydrogen Peroxide Vapour (or suitable agreed alternative). Compliance with this standard will be monitored and reported to IPCG on a quarterly basis.

8.0 On transfer or discharge from the clinical area, the single room must be terminally cleaned using a combined chlorine and detergent product, and then followed by Hydrogen Peroxide Vapour (HPV). Compliance with this standard will be monitored and reported to IPCG on a quarterly basis.

9.0 All equipment that has had contact with an affected patient must be cleaned using detergent and water followed by 1,000 parts per million of chlorine or combined chlorine and detergent agent (or suitable agreed alternative, e.g. wipes) made to the concentration specified on the packaging. This equipment can then be left in the room during HPV cleaning.

10.0 Antibiotic prescribing guidelines must be adhered to. Where variance is necessary this must be recorded and justification given in the healthcare record.

11.0 Where possible patients must be encouraged to wash their hands after toileting and before eating.

12.0 Used hospital linen must be disposed of as infected linen (See IP05).

13.0 Waste must be disposed of as clinical waste (See HS10).

14.0 Patients who have had CDI during the course of their hospital admission must have this communicated to any discharge destination - this includes resolved cases.

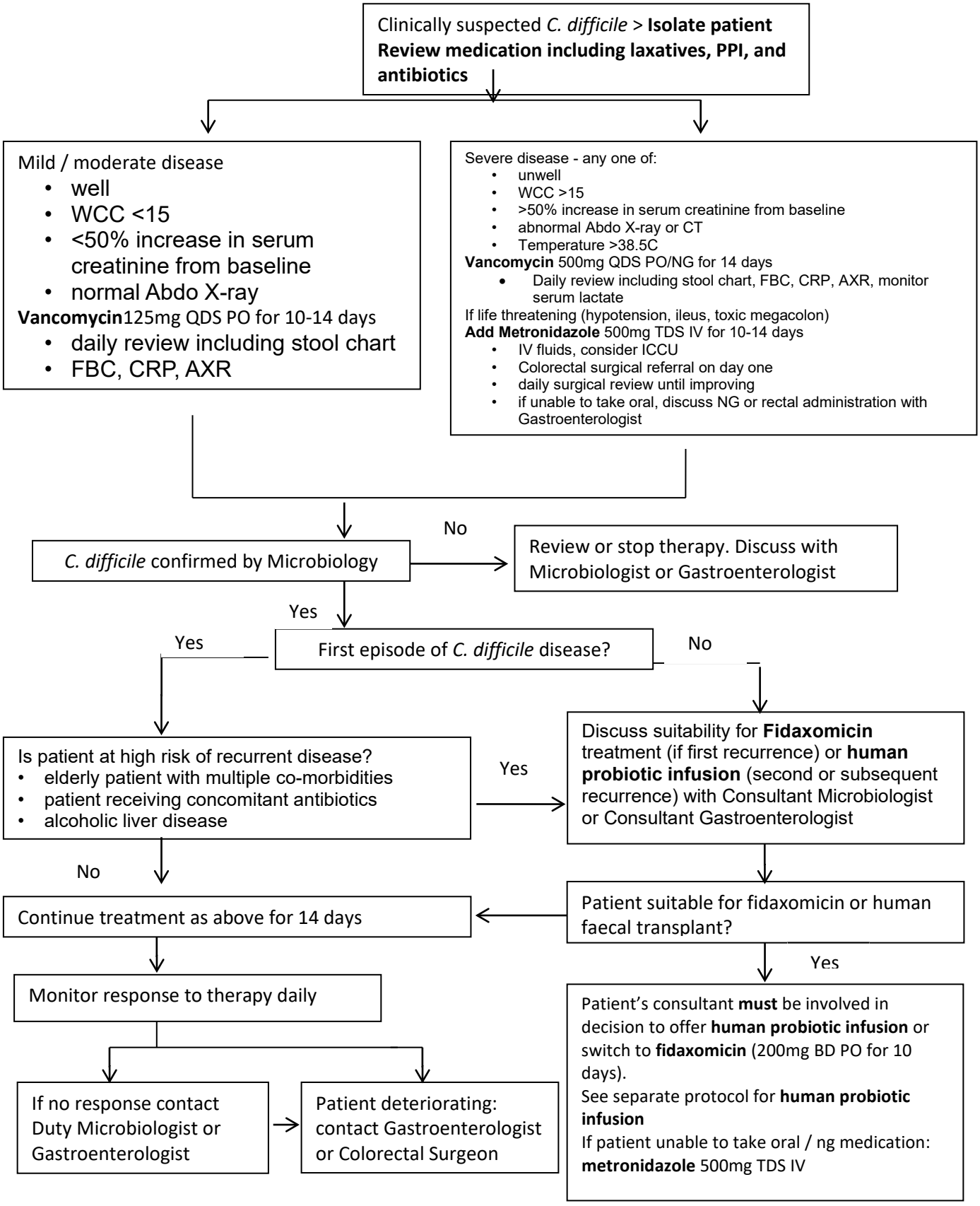
These destinations include:

- Home – the patients GP must be informed;
- Nursing and Residential homes;
- Resource Centres;
- District nurses;
- Other hospitals;
- Rehabilitation centres.

NB This list is not exhaustive.

IP 06 Attachment 6

Clostridioides difficile Treatment Algorithm - acute
Royal Wolverhampton NHS Trust



***Acute* - *Clostridioides difficile* Recurrence**

If a patient has responded to an agent and the course has been completed an apparent recurrence may be due to a re-infection.

Treatment of recurrence or re-infection:

For 1st recurrence of CDI diarrhoea in the hospital patient, call Consultant Microbiologist or Consultant Gastroenterologist to discuss the suitability of the patient for Fidaxomicin 200mgs BD for 10 days.

For patients with subsequent recurrence:

- Start treatment as per CDI Treatment Algorithm (see above).
- Contact Consultant Microbiologist or Consultant Gastroenterologist to discuss suitability of patient for **human probiotic infusion.**
- If patient unsuitable for **human probiotic infusion, proceed as follows.**

1] Assess as above and if severe treat as above.

2] For moderate disease treat with PO metronidazole 400mg TDS and PO vancomycin 500mg QDS.

3] If responds by day 5 then complete 14 days of metronidazole and 500mg QDS vancomycin and then institute 6 weeks of a tapering dose of vancomycin (see below).

4] If fails to respond after 5 days of combined therapy refer to Gastroenterology for consideration of flexible sigmoidoscopy. If remains symptomatic and CDI/ pseudomembranous colitis is confirmed on flexible sigmoidoscopy and no response has occurred after 10 days then consider IV Immunoglobulin (see below). The use of Immunoglobulin for this indication will have to be agreed by a least two members of the Trust Immunoglobulin Assessment Panel – members of this can be accessed via Pharmacy during working hours. Out of hours the on-call Microbiologist can give consent for the use of Immunoglobulin for severe *CDI*.

5] If patient deteriorates at any stage reassess and if severe treat as per algorithm.

6 weeks Tapering Vancomycin Regime (56 Capsules):

125mg every 6 hours (QDS) for 1 week
125mg every 12 hours (BD) for 1 week
125mg once daily for 1 week
125mg every other day for 1 week
125 mg every 3rd day for 2 weeks

IV Immunoglobulin

400mg / kg single dose with a repeat at 21 days if necessary

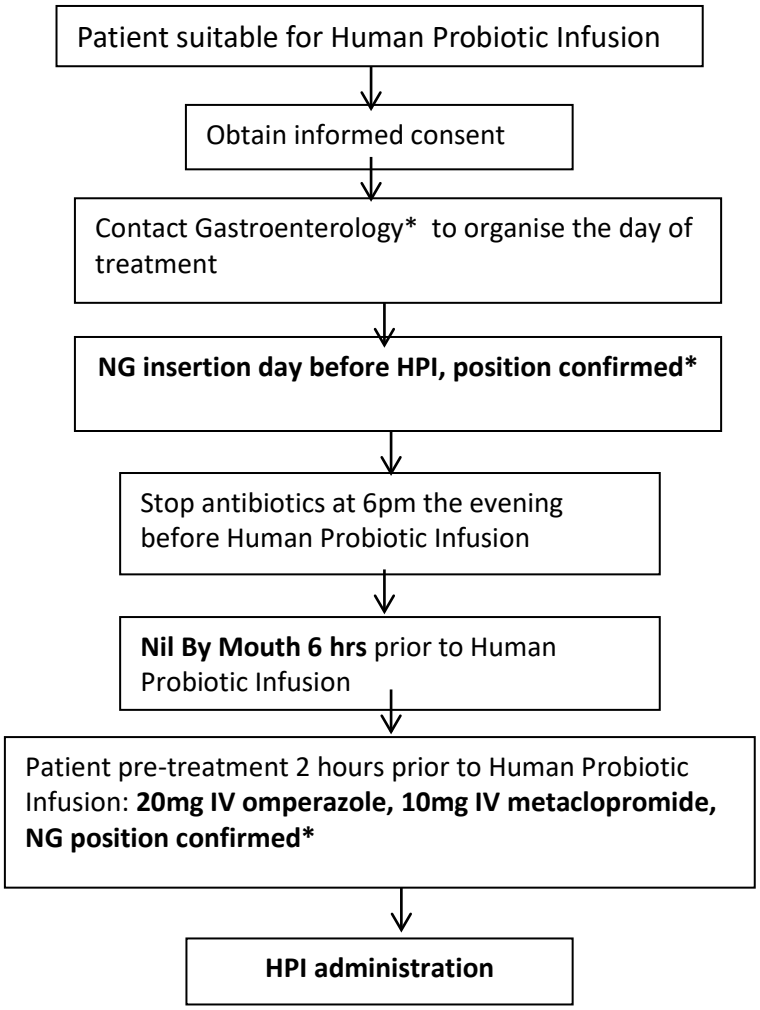
Human Probiotic Infusion (HPI)

If patient is considered suitable for human probiotic infusion, follow protocol below.

Inclusion criteria:
3rd episode of CDI (2nd recurrence);
Mild-moderate non-responders;
Salvage therapy in severe CDI not suitable for surgery.

Exclusion criteria:
No absolute contraindications
MDT discussion will be required for the following patient cohorts:
- Currently taking major immunosuppressive agents;
- Decompensated liver cirrhosis;
- Advanced HIV/AIDS;
- Recent bone marrow transplant;
- Severe immunodeficiency.

Human Probiotic Infusion Protocol



*Follow NCP03 for NG confirmation
http://intranet.xrwh.nhs.uk/pdf/policies/ncp_ns3_policy.pdf?Version=5

Yeast

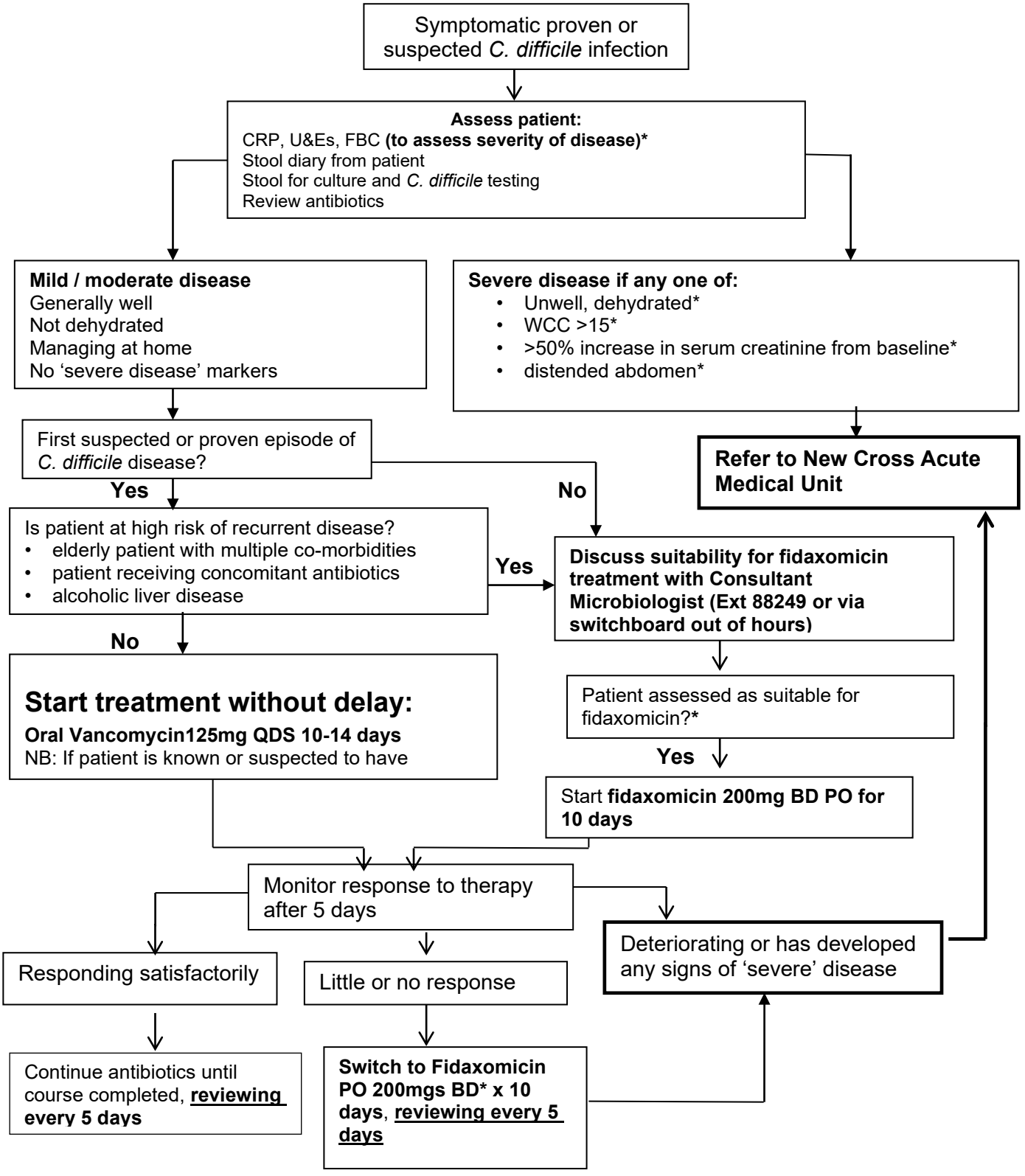
Yeast preparations are contraindicated.

Prebiotic and Probiotics (live yoghurt)

There is no proven benefit of prebiotics or probiotics in treating CDI. These agents cannot be prescribed and must not be advocated since there is no quality control over the agents that the patient will receive.

IP 06 Attachment 6

Community Treatment Algorithm for New Cases of *Clostridioides difficile* Infection (CDI)



***NB Fidaxomicin can only be prescribed with the approval of a Consultant Microbiologist or Consultant Gastroenterologist r Consultant Gastroenterologist**

IP06 Attachment 7

Escalation Plan in the event of a PII or Outbreak

1.0 Outbreaks affecting more than one area.

1.1. For outbreaks of CDI affecting more than one area, consideration for the opening of a specific isolation facility must be considered. This will require 48 hours notice from the Infection Prevention Team. See (IP10 Appendix 10) for the procedure for the opening of the isolation facility.

2.0 Periods of Increased Incidence and outbreaks

2.1. The procedure for suspected and confirmed outbreaks in the Outbreak Policy must be followed.

2.2. Specific actions for CDI will be recommended by the Outbreak Committee / Infection Prevention Team. Additional actions specific to CDI may include a combination of the following:

2.2.1. Daily review of all cases of CDI and infection prevention precautions.

2.2.2. Compliance with the CDI treatment and referral algorithm.

2.2.3. Review of use of Proton Pump Inhibitors on all patients in and entering the area.

Please refer to Adult Medical Antibiotic guidelines

http://intranet.xrwh.nhs.uk/pdf/policies/AdultMedicalGuidelines/PPI_Guidance.pdf

2.2.4. Every patient on the ward to have their stools monitored using the Bristol Stool. Chart for early recognition of diarrhoea.

2.2.5. Any patient with suspected symptoms to be treated as if they have CDI, placed on the treatment algorithm and on appropriate treatment until the cause of diarrhoea is proven otherwise.

2.2.6. Assessment and heightened awareness of hand hygiene, isolation and standard precautions.

2.2.7. The use of cohort bays.

2.2.8. Increase the area's cleaning hours and use of chlorine containing products.

2.2.9. Review of the organisation of the ward environment.

2.2.10 Review cleaning schedules and achievement of these on the ward.

2.2.11 Review of compliance with the total cleaning responsibilities paying particular attention to commode, toilet and mattress integrity and cleanliness.

2.2.12 Achievement of weekly cleaning of isolation rooms housing CDI affected patients using Hydrogen Peroxide Vapour.

2.2.13 Report incident via the Trusts incident reporting system. Also to Black Country Integrated Care Board (BCICB) and UK Health Security Agency (UKHSA).

2.2.14 Regular enhanced surveillance and feedback to the immediate clinical team.

Guidance on the completion of death certificates following a diagnosis of *Clostridioides difficile*

1.0 Overview

1.1. Medical staff have a legal duty under The Health and Social Care Act: Code of Practice for the Prevention of Healthcare Associated Infection (2008 rev. 2012) to record *Clostridioides difficile* infection (CDI) on a death certificate if it was part of the sequence of events leading to, or contributing to, the death of a patient.

2.0 Guidance for death certification

2.1 All cases where CDI is intended to be recorded in Part 1 of a death certificate must be discussed with a Consultant Microbiologist prior to doing so.

2.2 If a patient with CDI dies, the death certificate must state whether CDI was part of the sequence of events which led to the death or whether it was the underlying cause of death. If either case applies this must be recorded on part 1 of the death certificate.

2.3 If CDI was not part of the sequence of events leading directly to death but contributed in some way to, this must be recorded on the death certificate in Part 2.

2.4 If any doctor completing the death certificate is in doubt of the contribution of CDI to the death they must discuss this with either a Consultant Gastroenterologist or Microbiologist.

2.5 This information must be included in all training on death certification in the Trust.

2.6 Regular audits of the death certificates of patients who die and have had CDI in the months prior to their death must be undertaken.

2.7 Refer to OP87 Death Certification & Learning from Deaths Policy for further guidance.

IP 06 Attachment 8

The six prior healthcare exposure groups for *Clostridioides difficile*

1.0 Overview

1.1. The NHS Standard Contract 2023/24 includes quality requirements for NHS trusts and NHS foundation trusts to minimise rates of Clostridioides difficile (C. difficile). Since April 2017, reporting trusts have been asked to provide information on whether patients with C. difficile had been admitted to the reporting trust within the three months prior to the onset of the current case. This allows a greater granulation of the healthcare association of cases. (Taken from NHS England (2023) NHS Standard Contract 2023/24: Minimising Clostridioides difficile and Gram-negative bloodstream infections).

Prior healthcare exposure group	Definition
Hospital-onset, healthcare-associated (HOHA)	Specimen date is ≥3 days after the current admission date (where day of admission is day 1)
Community-onset, healthcare-associated (COHA)	Is not categorised HOHA and the patient was most recently discharged from the same reporting trust in the 28 days prior to the specimen date (where day 1 is the specimen date)
Community-onset, Indeterminate association (COIA)	Is not categorised HOHA and the patient was most recently discharged from the same reporting trust between 29 and 84 days prior to the specimen date (where day 1 is the specimen date)
Community-onset, Community associated (COCA)	Is not categorised HOHA and the patient has not been discharged from the same reporting organisation in the 84 days prior to the specimen date (where day 1 is the specimen date)
Unknown	The reporting trust answered 'Don't know' to the question regarding previous discharge in the 3 months prior to the case
No information	The reporting trust did not provide any answers to questions on prior admission

IP 06 Attachment 9

The six prior healthcare exposure groups for *Clostridioides difficile*

1.0 Overview

1.1. The NHS Standard Contract 2023/24 includes quality requirements for NHS trusts and NHS foundation trusts to minimise rates of Clostridioides difficile (C. difficile). Since April 2017, reporting trusts have been asked to provide information on whether patients with C. difficile had been admitted to the reporting trust within the three months prior to the onset of the current case. This allows a greater granulation of the healthcare association of cases. (Taken from NHS England (2023) NHS Standard Contract 2023/24: Minimising Clostridioides difficile and Gram-negative bloodstream infections).

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Unknown	The reporting trust answered 'Don't know' to the question regarding previous discharge in the 3 months prior to the case
No information	The reporting trust did not provide any answers to questions on prior admission