York Teaching Hospital NHS
NHS Foundation Trust

# Infection Prevention

# Control & Management of *Clostridium Difficile Infection* (CDI)

| | |
|---|---|
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| Publisher: | Compliance Unit |
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| Version: | 4 |
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| Approved by: | HIPCC |
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| Target audience: | All Trust Staff |
| Relevant Regulations and Standards | |


**Executive Summary**

This policy aims to give guidance for the safe management of *Clostridium difficile* infection.

## Version History Log

| Version | Date Approved | Version Author | Status & location | Details of significant changes |
|---|---|---|---|---|
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## Contents

## 1 Introduction & Scope

*Clostridium difficile* infection is the most common cause of hospital-acquired diarrhoea. *Clostridium difficile* is an anaerobic bacterium that is present in the gut of up to 3% of healthy adults and 66% of infants. However *Clostridium difficile* rarely causes problems in children or healthy adults, as it is kept in check by the normal bacterial population of the intestine.

This policy is for all health care workers who are responsible for direct care and management of patients.

## 2 Definitions

**CDI** - *Clostridium Difficile* Infection

**Spore** - is a reproductive structure that is adapted for dispersal and can survive for extended periods of time in unfavorable conditions

**Sporicidal** – a substance that can kill spores

**GDH** – glutamate dehydrogenase, an enzyme present in most microbes.

**PCR** – polymerase chain reaction; a process where a single or a few copies of a piece of DNA (genetic material) is amplified across several orders of magnitude.

**Toxin** - is a poisonous substance produced within living cells or organisms.

**Pseudomembranous colitis -** Pseudomembranous colitis is an infection of the large intestine, and is mainly associated with an overgrowth of *Clostridium difficile* bacteria in the gut.

## 3 Policy Statement

This policy aims to give guidance for the safe management of *Clostridium difficile*. *Clostridium difficile* Infection (CDI) ranges from mild to severe diarrhoea to, more rarely, severe inflammation of the bowel (known as pseudomembranous colitis). People who have been treated with broad spectrum antibiotics, people with

serious underlying illnesses and the elderly are at greatest risk – over 80% of *Clostridium difficile* infections reported affect people aged over 65 years.

Although some people can be healthy carriers of *C.difficile*, in most cases the disease develops after cross-infection from another patient, either through direct patient to patient contact, via healthcare staff, or via a contaminated environment. A patient who has *C.difficile* diarrhoea excretes large numbers of the spores in their liquid faeces. The spores can contaminate the general environment around the patient's bed (surfaces, keypads and equipment), the toilet areas, sluices, commodes, bedpan washers, etc. They can survive for a long time and be a source of hand-to-mouth infection.

Adapted from;

http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/ClostridiumDifficile

See appendices for medical and nursing management. (link to appendix list please)

## 4 Equality Impact Assessment

The Trust statement on Equality is available in the Policy for Development and Management of Policies at Section 3.3.4.

A copy of the Equality Impact Assessment for this policy is at appendix A.

## 5 Accountability

Corporate accountabilities are detailed in the **Policy for Development and Management of Policies** at section 5.

All healthcare professionals and volunteers are responsible and accountable to the Chief Executive for the correct implementation of this policy.

Professional staff are accountable according to their professional code of conduct. Medical staff are professionally accountable through the General Medical Council, and nurses are professionally accountable to the Nursing and Midwifery Council.

## 6 Consultation, Assurance and Approval Process

Consultation, assurance and approval process is detailed in section 6 of the **Policy for the Development and Management of Policies.**

The Stakeholder is the Hospital Infection Prevention Committee.

## 7 Review and Revision Arrangements

The date of review is given on the front coversheet.

Persons or group responsible for review is the Hospital Infection Prevention Committee

The Compliance Unit will notify the author of the policy of the need for its review six months before the date of expiry.

On reviewing this policy, all stakeholders identified in section 6 will be consulted as per the Trust's Stakeholder policy. Subsequent changes to this policy will be detailed on the version control sheet at the front of the policy and a new version number will be applied.

Subsequent reviews of this policy will continue to require the approval of the appropriate committee as determined by the **Policy for Development and Management of Policies.**

## 8 Dissemination and Implementation

### 8.1 Dissemination

Once approved, this policy will be brought to the attention of relevant staff as per the **Policy for Development and Management of Policies**, section 8 and Appendix C Plan for Dissemination.

This policy is available in alternative formats, such as Braille or large font, on request to the author of the policy.

## 8.2 Implementation of Policies

The Policy will be disseminated through the Consultants; Clinical Directors; Directorate Manager; Matrons; and Ward Managers via emails and meetings.

## 9 Document Control including Archiving

The register and archiving arrangements for policies will be managed by the Compliance Unit. To retrieve a former version of this policy the Compliance Unit should be contacted.

## 10 Monitoring Compliance and Effectiveness

This policy will be monitored for compliance with the minimum requirements outlined below.

### 10.1 Process for Monitoring Compliance and Effectiveness

| Evidence | Monitoring /Who by | Frequency |
|---|---|---|
| a. Hand hygiene | Hand hygiene audits completed by ward/ department staff | Monthly |
| b. Antimicrobial prescribing | Antimicrobial policy audits by Antimicrobial Stewardship Team Saving Lives High Impact intervention 7 | As required dependant on issues raised |
| c. Use of Personal Protective Equipment | Saving Lives High Impact Intervention 7 & 8 – cleaning clinical equipment completed by ward/ department staff | Monthly |

| | | |
|---|---|---|
| d. Decontamination equipment | Saving Lives High Impact Intervention 7 & 8 – cleaning clinical equipment completed by ward/ department staff<br>Matron Environment Audits completed by matrons | Monthly |
| e. Decontamination environment | Saving Lives High Impact Intervention 7<br>Monit audits completed by domestic teams<br>PEAT inspections completed by PEAT teams | According to risk category for each ward/ department |
| f. Isolation | IPT documentation records. CPD whiteboard records. | For individual patient cases |
| g. Data | CPD data, laboratory database surveillance by IPT | Monthly |

## 10.2 Standards/Key Performance Indicators

Saving Lives High Impact Intervention 8 – Cleaning clinical equipment

Hand Hygiene compliance data

IPT performance dashboards

# 11 Training

See section 11 of the **Policy for Development and Management of Policies** for details of the statutory and mandatory training arrangements.

# 12 Trust Associated Documentation

YHFT [CORP.RL10] Policy for the Development and Management of Policies

YHFT [GL.CLIN.CLIN3] Antimicrobial Formularies

YHFT [CLIN.IC19] Infection Prevention Policy for the Decontamination of Reusable Medical Devices and the Environment

YHFT [CLIN.IC12] Infection Prevention Policy for Effective Hand Hygiene

YHFT [CLIN.IC6] Infection Control Standard Precautions Policy

YHFT [CLIN.IC8] Infection Prevention Isolation Policy

# 13 External References

http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/ClostridiumDifficile

http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1232006607827 *Clostridium difficile* infection: How to deal with the problem

epic2: *National Evidence-Based Guidelines for Preventing Healthcare-Associated Infections in NHS Hospitals in England* R.J. Pratt, C.M. Pellow, J.A. Wilson, H.P. Loveday, P.J. Harper, S.R.L.J. Jones, C. McDougall, M.H. Wilcox; Richard Wells Research Centre, Faculty of Health and Human Sciences, Thames Valley University (London).

## 14 Appendices

Appendix A - Equality Impact Assessment Tool

Appendix B - Checklist for the Review and Approval

Appendix C - Plan for the Dissemination of the Policy

Appendix i - Clinical Management and treatment of CDI

Appendix ii - Escalation Procedure for Inability to Isolate within Two Hours

Appendix iii - Isolation Cleaning Guidance

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Appendix v – Risk assessment for *Clostridium Difficile*

Appendix vi – *Clostridium Difficile* Cycle

Appendix vii – CDI management flow charts

## Appendix A Equality Impact Assessment Tool

To be completed when submitted to the appropriate committee for consideration and approval.

| **Name of Policy:** | |
|---|---|

| | | |
|---|---|---|
| **1.** | **What are the intended outcomes of this work?** | |
| **2** | **Who will be affected?** | |
| **3** | **What evidence have you considered?** | |
| a | **Disability** | |
| b | **Sex** | |
| c | **Race** | |
| d | **Age** | |
| e | **Gender Reassignment** | |
| f | **Sexual Orientation** | |
| g | **Religion or Belief** | |
| h | **Pregnancy and Maternity**. | |
| i | **Carers** | |
| j | **Other Identified Groups** | |
| **4.** | **Engagement and Involvement** | |
| **a.** | Was this work subject to consultation? | Yes |

| | | |
|---|---|---|
| **b.** | How have you engaged stakeholders in constructing the policy | No |
| **c.** | If so, how have you engaged stakeholders in constructing the policy | |
| **d.** | For each engagement activity, please state who was involved, how they were engaged and key outputs | |
| **5.** | **Consultation Outcome**<br><br>Approved by Hospital Infection Prevention Committee<br><br>*Now consider and detail below how the proposals impact on elimination of discrimination, harassment and victimisation, advance the equality of opportunity and promote good relations between groups* | |
| **a** | Eliminate discrimination, harassment and victimisation | |
| **b** | Advance Equality of Opportunity | |
| **c** | Promote Good Relations Between Groups | |
| **d** | What is the overall impact? | |
| | **Name of the Person who carried out this assessment:** | |
| | **Date Assessment Completed** | |
| | **Name of responsible Director** | |

If you have identified a potential discriminatory impact of this procedural document, please refer it to the Equality and Diversity Committee, together with any suggestions as to the action required to avoid/reduce this impact.

## Appendix B Checklist for the Review and Approval

To be completed and attached to any document which guides practice when submitted to the appropriate committee for consideration and approval.

| | Title of document being reviewed: | Yes/No/ Unsure | Comments |
|---|---|---|---|
| **1** | **Development and Management of Policies** | | |
| | Is the title clear and unambiguous? | | |
| | Is it clear whether the document is a guideline, policy, protocol or procedures? | | |
| **2** | **Rationale** | | |
| | Are reasons for development of the document stated? | | |
| **3** | **Development Process** | | |
| | Is the method described in brief? | | |
| | Are individuals involved in the development identified? | | |
| | Do you feel a reasonable attempt has been made to ensure relevant expertise has been used? | | |
| | Is there evidence of consultation with stakeholders and users? | | |
| | Has an operational, manpower and financial resource assessment been undertaken? | | |
| **4** | **Content** | | |
| | Is the document linked to a strategy? | | |
| | Is the objective of the document clear? | | |
| | Is the target population clear and unambiguous? | | |

| | Title of document being reviewed: | Yes/No/ Unsure | Comments |
|---|---|---|---|
| | Are the intended outcomes described? | | |
| | Are the statements clear and unambiguous? | | |
| **5** | **Evidence Base** | | |
| | Is the type of evidence to support the document identified explicitly? | | |
| | Are key references cited? | | |
| | Are the references cited in full? | | |
| | Are local/organisational supporting documents referenced? | | |
| **5a** | **Quality Assurance** | | |
| | Has the standard the policy been written to address the issues identified? | | |
| | Has QA been completed and approved? | | |
| **6** | **Approval** | | |
| | Does the document identify which committee/group will approve it? | | |
| | If appropriate, have the staff side committee (or equivalent) approved the document? | | |
| **7** | **Dissemination and Implementation** | | |
| | Is there an outline/plan to identify how this will be done? | | |
| | Does the plan include the necessary training/support to ensure compliance? | | |
| **8** | **Document Control** | | |
| | Does the document identify where it | | |

| | Title of document being reviewed: | Yes/No/ Unsure | Comments |
|---|---|---|---|
| | will be held? | | |
| | Have archiving arrangements for superseded documents been addressed? | | |
| **9** | **Process for Monitoring Compliance** | | |
| | Are there measurable standards or KPI to support monitoring compliance of the document? | | |
| | Is there a plan to review or audit compliance with the document? | | |
| **10** | **Review Date** | | |
| | Is the review date identified? | | |
| | Is the frequency of review identified? If so, is it acceptable? | | |
| **11** | **Overall Responsibility for the Document** | | |
| | Is it clear who will be responsible for coordinating the dissemination, implementation and review of the documentation? | | |

| **Individual Approval** | | | |
|---|---|---|---|
| If you are happy to approve this document, please sign and date it and forward to the chair of the committee/group where it will receive final approval. | | | |
| Name | | Date | |
| Signature | | | |
| **Committee Approval** | | | |
| If the committee is happy to approve this document, please sign and date it and forward copies to the person with responsibility for disseminating and implementing the document and the person who is responsible for | | | |

| | | | |
|---|---|---|---|
| maintaining the organisation’s database of approved documents. | | | |
| Name | | Date | |
| Signature | | | |

## Appendix C Plan for dissemination of policy

To be completed and attached to any document which guides practice when submitted to the appropriate committee for consideration and approval.

| | |
|---|---|
| **Title of document:** | |
| **Date finalised:** | |
| **Previous document in use?** | |
| **Dissemination lead** | |
| **Which Strategy does it relate to?** | |
| **If yes, in what format and where?** | |
| **Proposed action to retrieve out of date copies of the document:** | **Compliance Unit will hold archive** |

### Dissemination Grid

| **To be disseminated to:** | **1)** | **2)** |
|---|---|---|
| **Method of dissemination** | | |
| **who will do it?** | | |
| **and when?** | | |
| **Format (i.e. paper or electronic)** | **Electronic** | |

### Dissemination Record

| | |
|---|---|
| **Date put on register / library** | |
| **Review date** | |
| **Disseminated to** | |
| **Format (i.e. paper or electronic)** | |
| **Date Disseminated** | |
| **No. of Copies Sent** | |
| **Contact Details / Comments** | |

## Appendix i

### Clinical management and treatment of CDI

Medical and nursing staff should apply the following mnemonic protocol (SIGHT) 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 must be used for body fluid exposure; 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 toxin, by sending a specimen to the laboratory at onset of symptoms. |

- Patients should be monitored daily for frequency and severity of diarrhoea using the Bristol Stool Chart
- Review antibiotics and discontinue those that are not required as well as other drugs that may cause diarrhoea
- CDI should be managed as a diagnosis in its own right, with each patient reviewed daily regarding fluid resuscitation, electrolyte replacement and nutrition review. This must be documented
- Monitor for signs of increasing severity of disease, with early referral to ICU as patients may deteriorate very rapidly
- A team consisting of a microbiologist, an Infection Prevention and Control doctor, a gastroenterologist or surgeon, and an infection prevention nurse must review all CDI patients at **least** weekly to ensure that the infection is being treated optimally and that the patient is receiving all necessary supportive care.
- Assess the severity of CDI each day as follows:

- **Mild CDI** is not associated with a raised WCC; it is typically associated with <3 stools of types 5–7 on the Bristol Stool Chart per day.
- **Moderate CDI** is associated with a raised WCC that is <15 109/L; it is typically associated with 3–5 stools per day.
- **Severe CDI** is associated with a WCC >15 ▪ 109/L, or an acute rising serum creatinine (i.e. >50% increase above baseline), or a temperature of >38.5°C, or evidence of severe colitis (abdominal or radiological signs). The number of stools may be a less reliable indicator of severity.
- **Life-threatening CDI** includes hypotension, partial or complete ileus or toxic megacolon, or CT evidence of severe disease.

**Treat according to severity**

- **Mild and moderate CDI** – oral metronidazole 400–500 mg tds for 10–14 days.
- **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. The addition of oral rifampicin (300 mg bd) or IV immunoglobulin (400 mg/kg) may also be considered.
- **Life-threatening CDI** – oral vancomycin up to 500 mg qds for 10–14 days via nasogastric tube or rectal installation plus IV metronidazole 500 mg tds.
- Such patients should be closely monitored, with specialist surgical input, and should have their blood lactate measured. Colectomy should be considered, especially if caecal dilatation is >10 cm. Colectomy is best performed before blood lactate rises >5 mmol/L, when survival is extremely poor.
- If diarrhoea persists despite 20 days' treatment but the patient is stable and the daily number of type 5–7 motions has decreased, the WCC is normal, and there is no abdominal pain or distension, the persistent diarrhoea may be due to post-infective irritable bowel syndrome.

- The patient may be treated with an anti-motility agent such as loperamide 2 mg prn (instead of metronidazole or vancomycin). The patient should be closely observed for evidence of a therapeutic response and to ensure there is no evidence of colonic dilatation.
- **For first recurrence**, repeat the same antibiotic used to treat the initial episode (unless the first episode was treated with metronidazole and the recurrence is severe CDI, in which case vancomycin should be used).
- **For subsequent recurrences**, use vancomycin 125 mg qds.

**Death certification**

- If a patient with CDI dies, the death certificate should state whether CDI was part of the sequence of events leading directly to death or whether it was the underlying cause of death. If either case applies CDI should be mentioned in Part 1 of the certificate.
- If CDI was not part of the sequence of events leading directly to death but contributed in some way to it, this should be mentioned in Part 2.
- Doctors have a **legal duty** to mention CDI on a death certificate if it was part of the sequence of events directly leading to death or contributed in some way.

Adapted from;
http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_093218.pdf

## Appendix ii

## Isolation – Escalation Procedure for Inability to Isolate within Two Hours

On occasions it may not be possible to place all patients who require isolation within two hours. Inability to isolate will require escalation to senior staff.

The Infection Prevention Team in collaboration with the Consultant Microbiologist is responsible for the clinical decision on which patient(s) should be isolated or cohorted in order to control the spread of infection.

**Consultant Microbiologists and members of the Infection Prevention Team are on-call 24 hrs/day for whole weeks (Monday-Monday 09:00-09:00). Therefore out of hours calls must be for emergencies only, which require urgent action before the next working day**.

In order to make this decision the Infection Prevention Team & Microbiologist will require the following information:

- The infection status of each patient on the ward.
- A description of the physical layout of the wards including;
    - number of beds
    - number and type of bays
    - number and location of side rooms
    - whether any parts of the wards patient are part of a corridor for through traffic bed areas
    - Symptoms of clinical infection e.g. purulent discharge, diarrhoea and/or vomiting and coughing/expectorating patient
    - The site or specimen from which the infection has been isolated (e.g. wound swab, sputum etc)
    - The organism that is causing the infection (if known)
    - The behaviour of the patient (e.g. tendency to wander, disruptiveness, mobility etc.)
    - Psychological and other medical factors (e.g. presence of depression/anxiety, need for observation etc.)

- Current/recent incidences of ‘’inability to isolate’’ resulting in patients with infections being nursed in open bays
- Clinical requirements (e.g. speciality specific treatment/care or clinical reasons why Isolation might compromise patient safety)

It will not be possible for the Infection Prevention Team/Microbiologist to make a decision on isolation if this information is not available.

**Failure to isolate**

Ward staff must alert the Matron and IPT during office hours and complete an AIR’s form if unable to isolate patient. Out of hours the Bed Managers must be informed and the incident should be recorded and reported as above. The Infection Prevention Team must be updated during office hours.

(The above guidance is applicable for all cases of infection that require isolation)

## Appendix iii

### Isolation Cleaning Guidance

### Hand hygiene - staff

- **During isolation for C.diff/diarrhoeal illnesses *all* hand decontamination within the room/area must be with liquid soap and water.**
- Hand decontamination is required in the following circumstances:
    - Immediately before putting on gloves
    - Immediately after removing gloves and apron (e.g. following a procedure or any contact with a patient or their immediate environment)
    - Immediately before donning gloves and apron if these are replaced whilst in the room (e.g. following a procedure, between patients)
    - Immediately before leaving the room
    - Immediately after leaving the room

### Environmental Decontamination

- The nursing staff on the ward must notify domestic services for active cases of C.diff that the ward requires a twice daily Chlor clean & toilets four times daily Chlor clean
- An **enteric** door notice must be displayed at the entrance to the side room, area (e.g. cubicle) or cohort facility by the nursing staff to alert clinical and non clinical staff that the patient/s are in isolation
- The Domestic Supervisor must ensure that all staff working in that area are aware of the procedure for the cleaning of isolation rooms, areas or cohort facilities
- A daily record must be kept as evidence that enhanced cleaning has been performed to a satisfactory standard and signed by domestic and nursing staff
- All patient care equipment in the room should be dedicated to the isolated patient
- **It is the nurse's responsibility to ensure that all patient care equipment that is used in isolation rooms is decontaminated** using either a solution of 1,000 p.p.m

available chlorine i.e. Chlor-Clean **or** Clinell Sporicidal Wipes (Red Pack)
- Toilets and commodes must be cleaned after each use as above
- Baths must be cleaned after use as above
- The bed space vacated by the infected patient on the ward must be cleaned thoroughly
- The bed, mattress, bed rails locker, chair and table must be cleaned by nursing staff, this must be recorded on the bed space cleaning record
- Single patient use equipment must be disposed of in clinical waste when no longer required

## How to decontaminate the isolation room on a daily basis

- Isolation rooms, bed spaces or cohort facilities should be cleaned after the other rooms, bays and general areas on the ward
- Put on single apron before entering the isolation room, area or cohort facility
- Put on gloves prior to contact with chemicals e.g. Chlor clean
- Damp dust all surfaces with the Chlor-Clean solution using a single use disposable micro-fibre cloth. After use, dispose of cloth as clinical waste into an orange or yellow waste bag (this will depend on clinical area)
- Make sure the areas that are touched frequently are cleaned and dried thoroughly e.g. door handles, taps, toilet handles/pulls, and push plates and nurse call bell
- Mop the floor using the microfibre system with a solution of Chlor-Clean
- When the cleaning process is finished remove apron and gloves, dispose of into clinical waste bags and wash and dry hands thoroughly with soap and water before leaving the isolation room, area or cohort facility

## How to use Chlor-Clean for general environmental disinfection

- Microfibre cloths and mops can be used with Chlor-Clean
- Always wear protective gloves and an apron
- Refer to Control of Substances Hazardous to Health (COSHH) information and check date on product label

- Do not use this product unless you have received training on the correct use of Chlor-Clean, check with the Domestic Supervisors
- For environmental cleaning add one Chlor-Clean tablet to every one litre of cold water e.g. 1 tablet per litre; 2 tablets per 2 litres; etc. (this will make up 1,000 p.p.m available chlorine)
- Mix in a well ventilated room away from the patients using cold water. Leave the tablets to dissolve before use (this can take up to 15 minutes to dissolve), label with time of dilution; the solution must not be used 8 hours after constitution
- **Chlorine products will bleach fabrics and corrode metal. On exposed metal parts wash off the Chlor-Clean solution with clean water and dry thoroughly with paper towels**

## Environmental Decontamination for vacated rooms

- The bed space vacated by the infected patient on the ward must be cleaned effectively and thoroughly
- The bed, mattress, bed rails locker, chair and table must be cleaned by nursing staff, this must be recorded on the bed space cleaning record
- Single patient use equipment must be disposed of in clinical waste when no longer required
- Remove bed linen and all unused linen
- Clean the bed; bed frame and mattress/pillow/s with a single use cloth and a solution of Chlor-Clean **or** Clinell Sporicidal Wipes (Red Pack)
- Clean each mattress as per local protocol

**NB The mattress cover should be carefully inspected at each cleaning. If damaged or torn then the mattress should be disposed of as an infection risk**

## Domestic Staff

- Walls do not need to be washed unless visibly soiled or otherwise requested by the Infection Prevention and Control Team
- When cleaning is finished, dispose of the single use cloths and mop as clinical waste

- Curtains will need to be changed and laundered (or replaced if disposable paper curtains are used) as a component of the final cleaning process

**N.b. for virulent strains of *clostridium difficile* e.g. ribotype 027, Bioquell (hydrogen peroxide vaporization system) may be required for environmental decontamination; this decision will be taken by the IPT.**

Appendix iv

Date + Time: ……

**The registered nurse in charge of this patient is responsible for the initiation control measures for *Clostridium Difficile Infection* (CDI) treatment and dissemination of information regarding care and management**

***Every effort should be made to isolate all patients who are symptomatic with diarrhoea as soon as possible, if this is not achievable contact Infection Prevention for advice (ext 5860)***

☐ Upon diagnosis **isolate** (if not already achieved as above) within 2hrs

☐ Doctors should discuss treatment with microbiologists as required; if commenced on drug therapy review effectiveness after 3 days; check 3rd day CRP.

☐ Bristol stool chart must used to monitor stool frequency and type

☐ Complete High Impact Intervention No. 7 documentation

☐ Allocate an isolation pack containing single patient use items (B.P. cuff etc. available from IPT/Bed Managers)

☐ Use sporicidal wipes to clean shared clinical equipment (as above)

☐ Any item which cannot be effectively cleaned must be discarded as clinical waste when no longer required

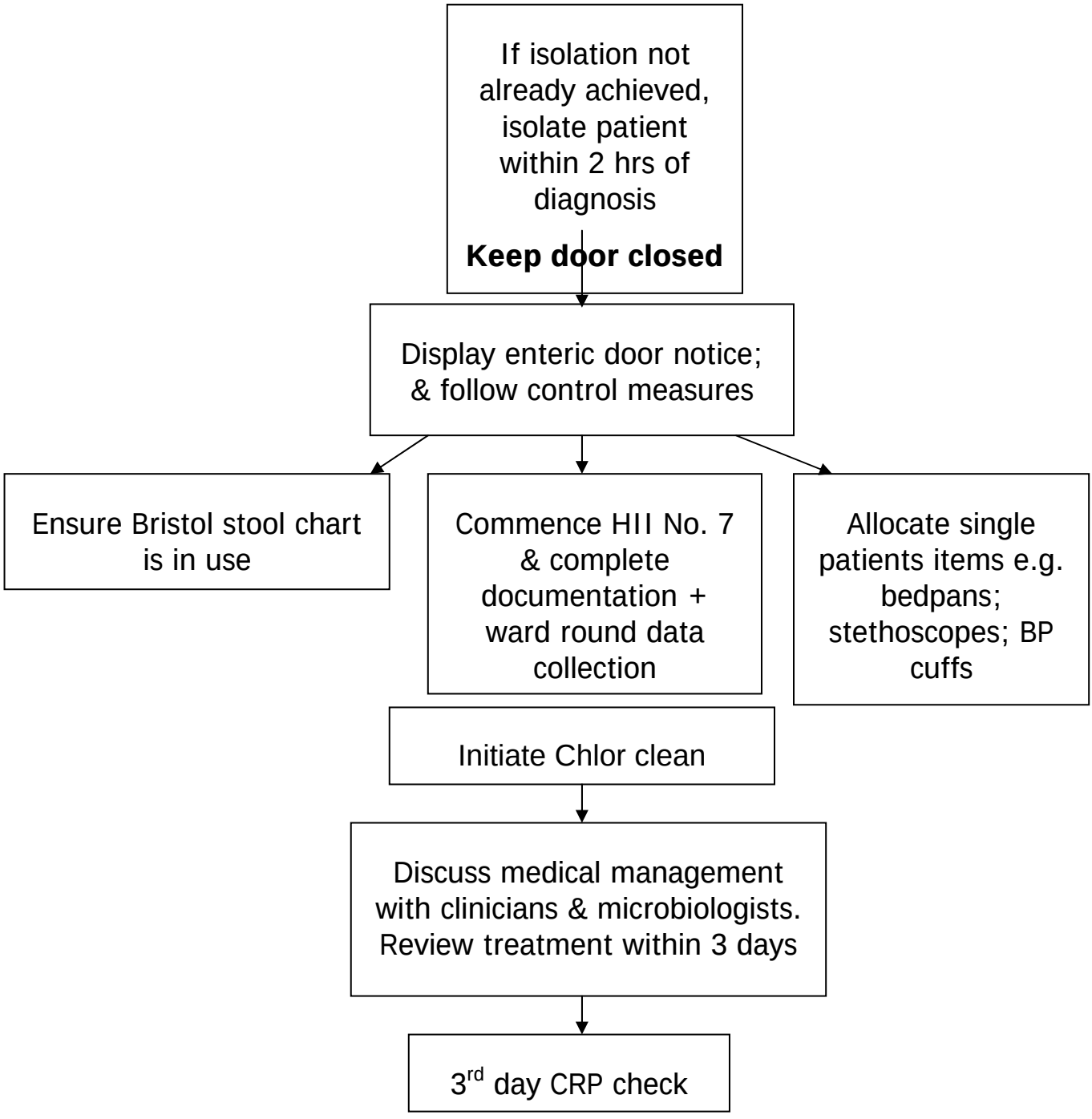
☐ The patient must be allocated their own toilet/commode/bedpan for the duration of the illness

☐ Change bed linen daily, dispose of as infected linen

☐ Ensure 'Enteric' door notice is displayed.

**Please refer to door notice for full instructions on Hand Hygiene; Waste/Linen Disposal and Environmental Cleaning. The door must be kept closed at all times**

## Management of confirmed *c. difficile*




**On discharge to another health care facility the nurse in charge of the patient's care must complete an Inter- Healthcare Transfer Form which will inform the receiving health care provider of the patient's infection status (inform ambulance crew transporting patient of status)**

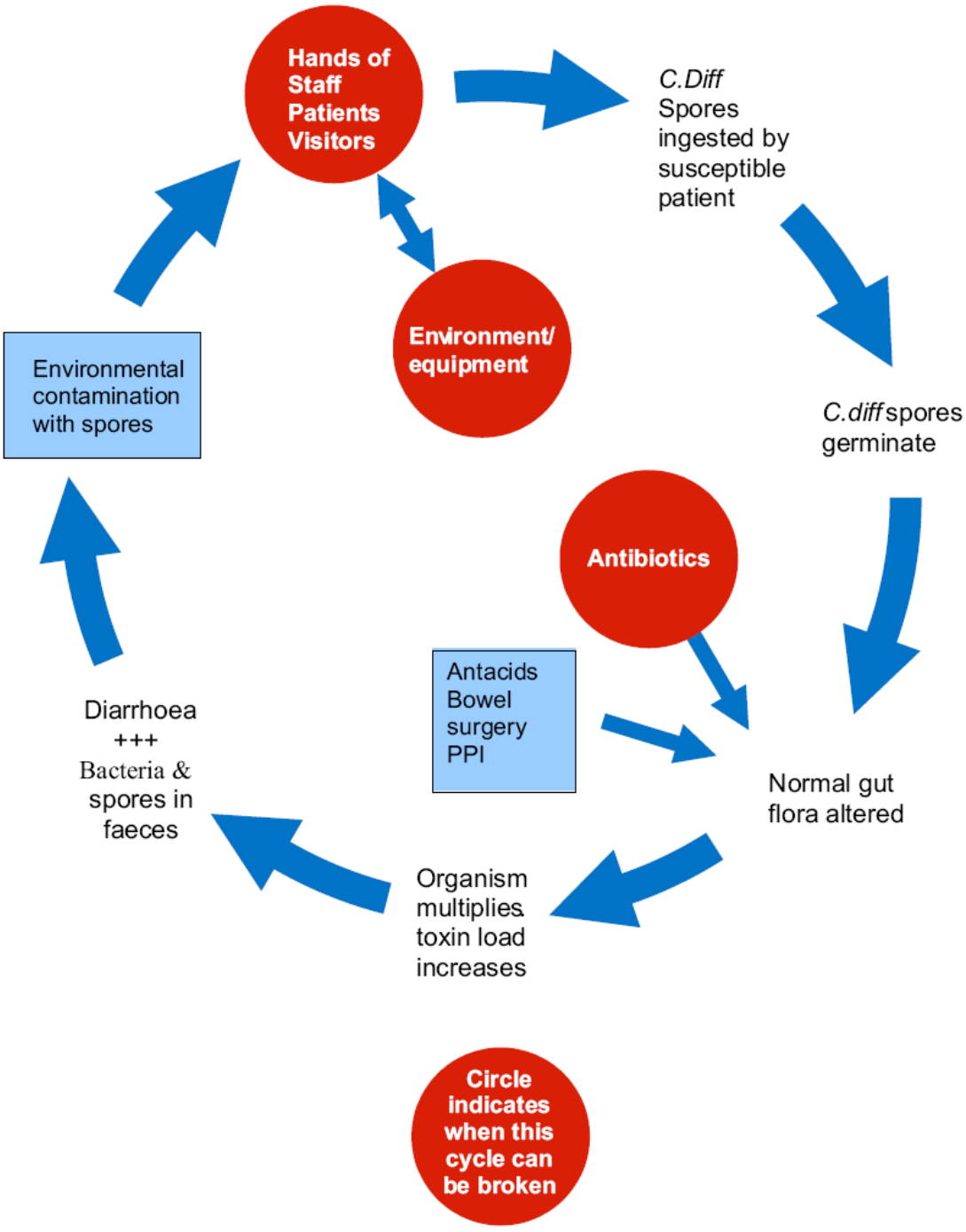
# Risk Assessment for Clostridium Difficile (C-diff)

| | |
|---|---|
| **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 must be used for body fluid exposure; 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 toxin, by sending a specimen to the laboratory at onset of symptoms. |

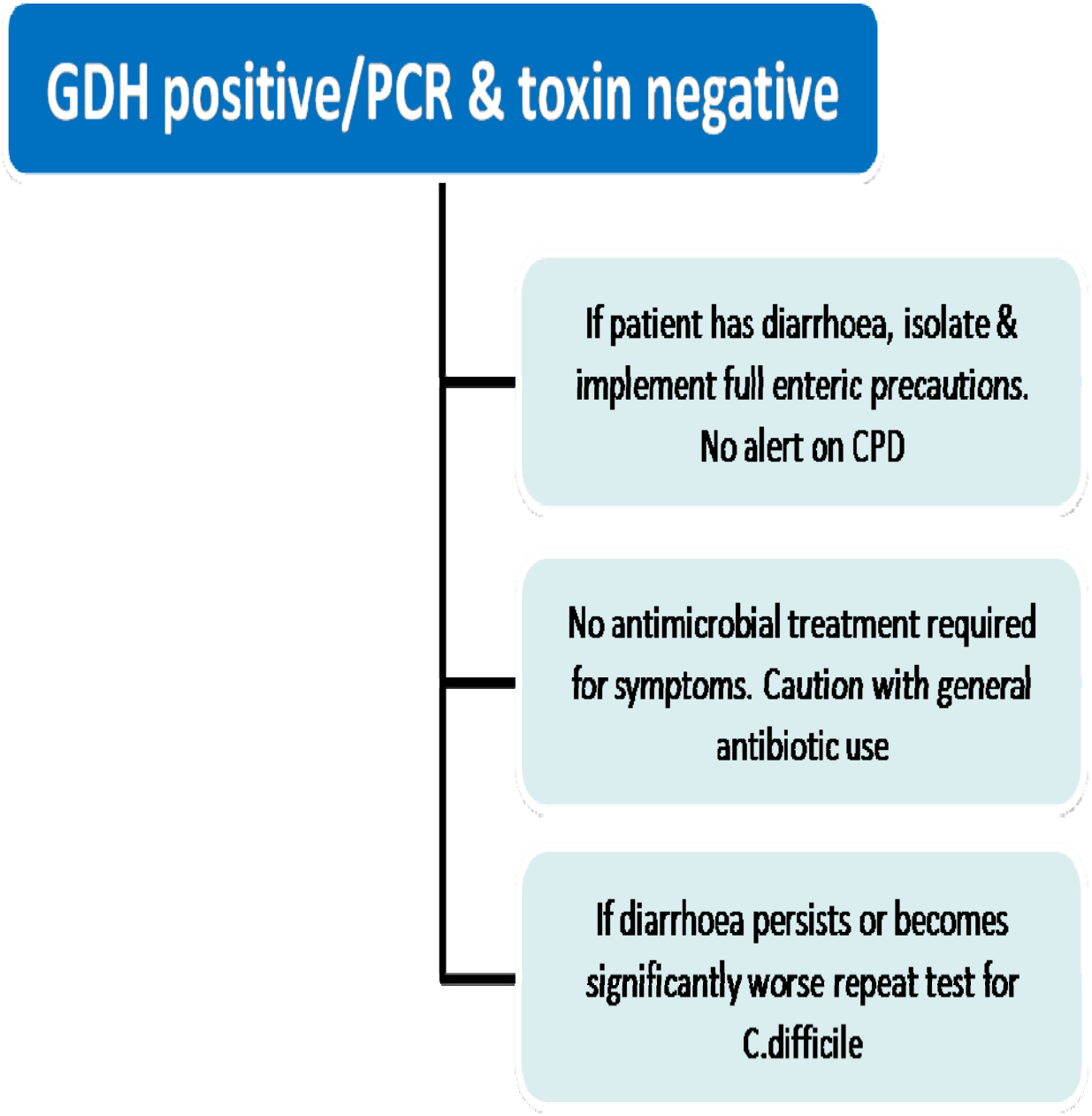
| **Risk** | **Action** | | **Initial** | **Date** |
|---|---|---|---|---|
| **Diarrhoea** | Isolate patient immediately; initiate enteric precautions | | | |
| | Send stool sample via air tube system | | | |
| | Start stool chart | | | |
| | Chlor clean vacated area and isolation room | | | |
| | Inform Infection Prevention Team (IPT) (x5860) | | | |
| | If sample positive for *C-diff*, initiate enhanced cleaning regimen with Chlor clean of the whole ward twice a day and toilets four times a day | | | |
| | If unable to isolate: | discuss with IPT | | |
| | | review side room occupancy | | |
| | | complete an AIRs form | | |
| **Flagging or history of *C-diff*** | Caution with antibiotics-seek microbiologist advice | | | |
| | Observe for diarrhoea | | | |
| | Isolation not necessary if no symptoms of diarrhoea | | | |
| **Antibiotics**<br>**PPI**<br>**Chemotherapy**<br>**Laxatives**<br>**Steroids** | Closely observe for diarrhoea - if patient develops diarrhoea (type 5-7 Bristol score) follow advice above for diarrhoea risk. | | | |
| **Non of the above** | No action required, reassess if condition changes. | | | |

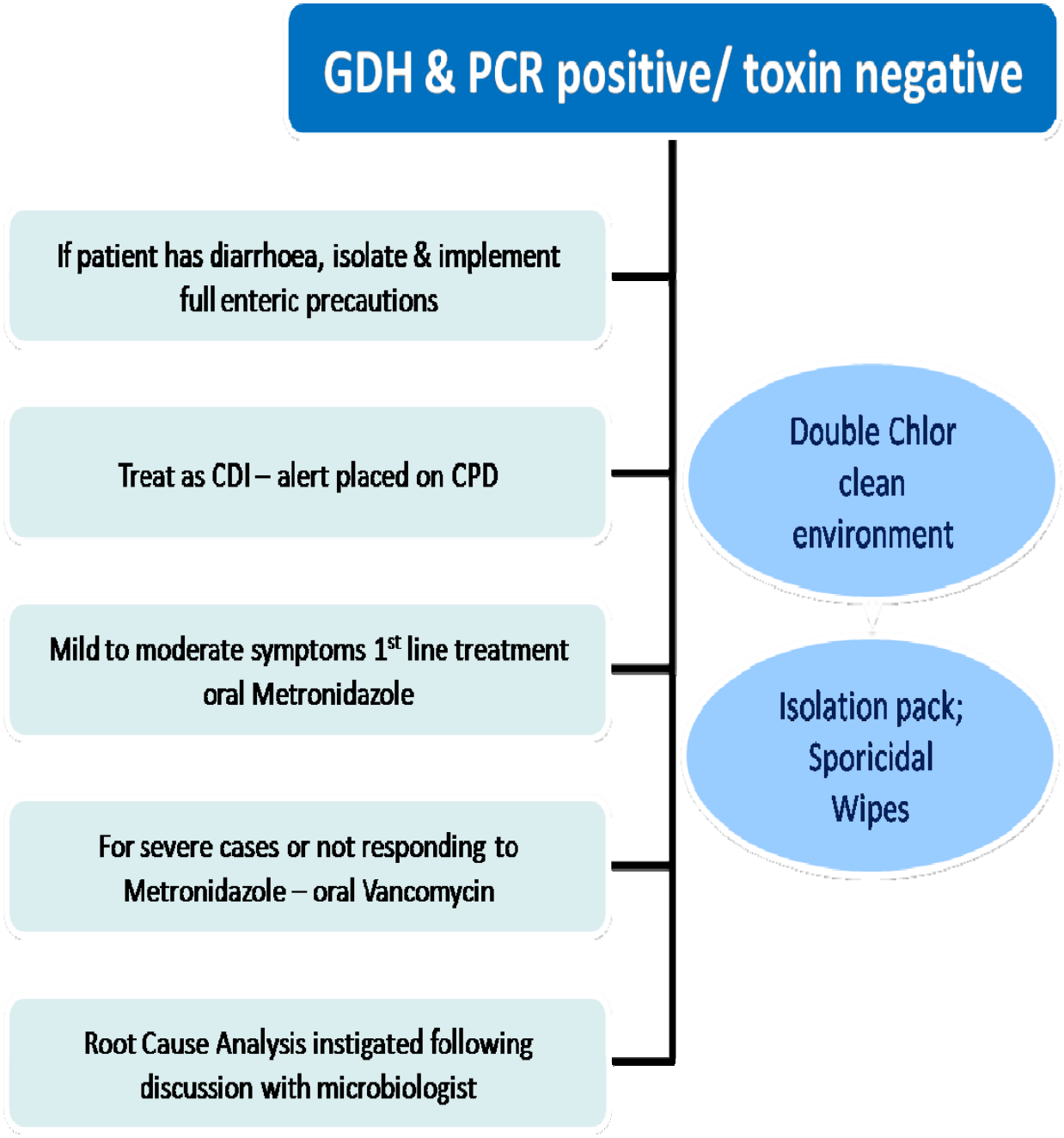
Appendix vi

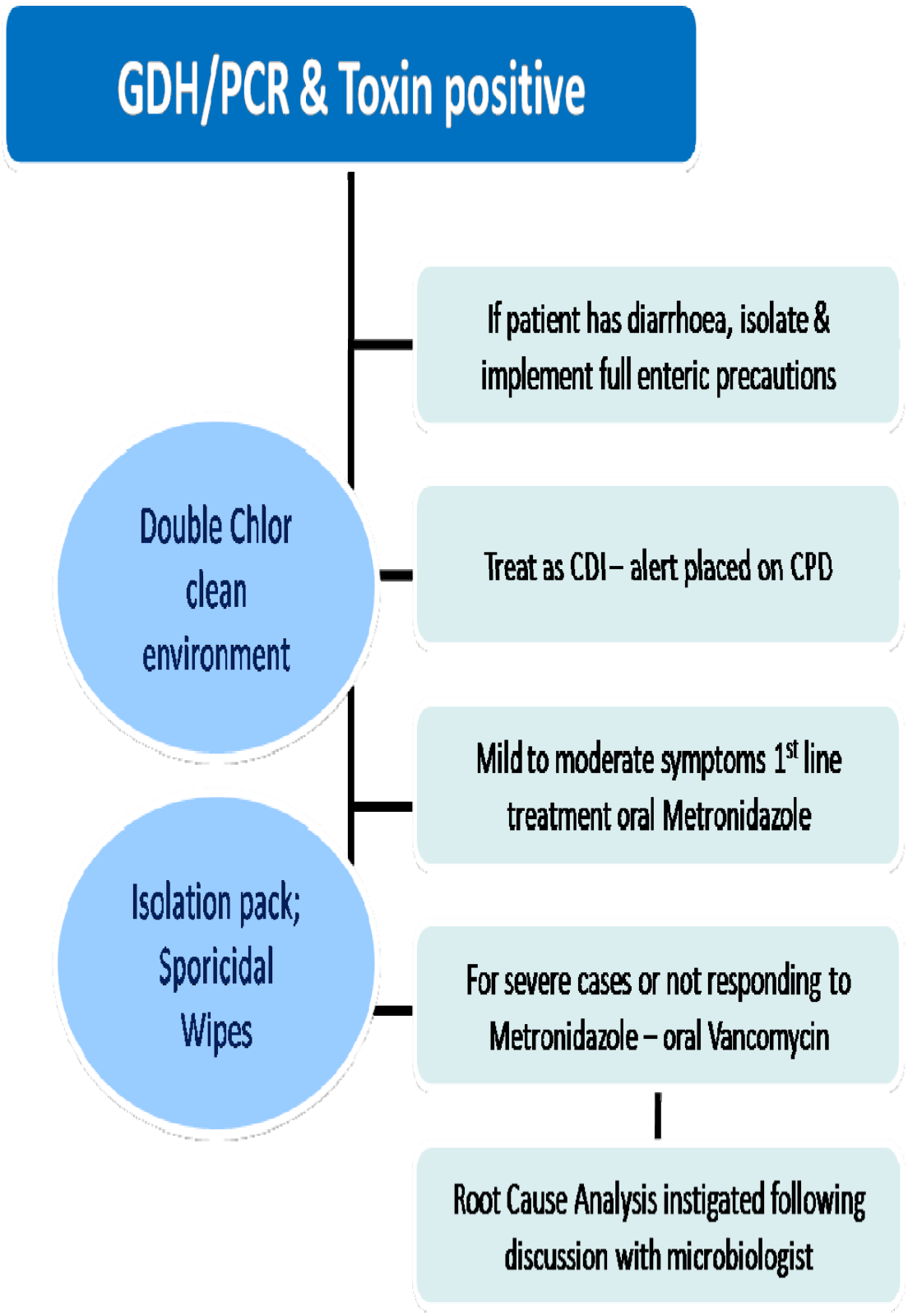
# Clostridium difficile cycle



Appendix vii




GDH & PCR positive/ toxin negative
If patient has diarrhoea, isolate & implement full enteric precautions
Treat as CDI – alert placed on CPD
Mild to moderate symptoms 1st line treatment oral Metronidazole
For severe cases or not responding to Metronidazole – oral Vancomycin
Root Cause Analysis instigated following discussion with microbiologist
Double Chlor clean environment
Isolation pack; Sporicidal Wipes


GDH/PCR & Toxin positive
If patient has diarrhoea, isolate & implement full enteric precautions
Double Chlor clean environment
Treat as CDI – alert placed on CPD
Mild to moderate symptoms 1st line treatment oral Metronidazole
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