

# PAPER

BOD 101/2012

(Agenda Item: 8)

# Report to the Meeting of the

# Oxford Health NHS Foundation Trust

# Board of Directors

**25 July 2012**

***Clostridium Difficile* Management**

**For: Approval**

Executive Summary:

*Clostridium difficile* infection (CDI) is the major cause of antibiotic-associated diarrhoea and colitis and is a healthcare associated intestinal infection that mostly affects older patients with other underlying disease. In March 2012 the Department of Health (DH) published new guidance regarding the diagnosis and reporting of *Clostridium difficile* infection.

This report identifies the action being taken by Oxford Health NHS Foundation Trust to meet the requirements of the new guidance.

This report will be presented to the infection prevention, control and decontamination committee for discussion on 18th July 2012.

**Report**

Summary of key points:

* Patients with unexplained diarrhoea will be fully assessed for possible causes and the SIGHT mnemonic algorithm used.
* Only patients with unexplained diarrhoea who have been medically reviewed and CDI is suspected should be tested. The Oxford University Hospitals Trust will only test patients for CDI if requested to do so.
* Specimens should only be sent by trained nurses and the result actively followed up the next working day and action taken if required.
* SLA and reporting arrangements will be reviewed by the 5 Trusts providing laboratory services in order to ensure significant results are received at the earliest opportunity so patients can be safely cared for.
* Vancomycin will be held as stock on high risk wards to ensure patients can be commenced on CDI treatment as soon as possible.
* Root cause analysis investigations are conducted for all CDI cases and learning identified. Action plans are developed through the SIRI panel process, the weekly corporate clinical governance meeting updated and plans are actioned by the relevant division.

We will continue to work closely with our colleagues and if there are any changes in the future in national guidance or virulence of CDI cases our procedures will be reviewed.

**Recommendation**

The Board are asked to note the report and approve the action being taken.

**Author and Title:** **Helen Bosley, Infection Prevention and Control Matron**

**Lead Executive Director: Ros Alstead, Director of Infection Prevention and Control (DIPC) and Director of Nursing and Clinical Standards**

1. *A risk assessment has been undertaken around the legal issues that this paper presents and there are no issues that need to be referred to the Trust Solicitors.*
2. *This paper (including all appendices) has been assessed against the Freedom of Information Act and the following applies: [delete as appropriate]*
* *THIS PAPER MAY BE PUBLISHED UNDER FOI*
1. *This paper provides assurance and evidence against the Care Quality Commission Outcome: 8*



***Clostridium Difficile-* Updated Guidance on the diagnosis and reporting**

**Introduction**

*Clostridium difficile* infection is the major cause of antibiotic-associated diarrhoea and colitis and is a healthcare associated intestinal infection that mostly affects older patients with other underlying disease. Increasing proportions of older people may carry the bacterium without symptoms - around 20% of people aged over 65 in hospital. Those who are at greatest risk of *Clostridium difficile* infection are people who have been treated with broad spectrum antibiotics, people with serious underlying illnesses and the elderly. Antibiotics are known to disturb the balance of bacteria in the gut allowing *Clostridium difficile* to multiply rapidly and produce toxins which may cause illness.

**New Testing**

In March 2012 the Department of Health (DH) published new guidance regarding the diagnosis and reporting of *Clostridium difficile* infection (CDI).

This revised guidance to healthcare providers identifies two types of tests GDH (glutamate dehydrogenase), stage 1 and EIA (Enzyme immunoassay) stage 2. The specimen must be GDH positive in order to proceed to the stage 2 test. Both tests must be positive for the specimen to be deemed positive. The GDH test has been used previously in other local Trusts who have reported higher numbers of CDI cases.

The guidance refers to sending specimens for patients on the first episode of diarrhoea (Bristol Stool Chart types 5-7) that is not clearly attributable to an underlying condition (e.g. inflammatory colitis, overflow) or therapy (e.g. laxatives, enteral feeding) then it is necessary to determine if this is due to CDI. The point in this guidance is whether or not the diarrhoea is attributable to other reasons and often this is harder to establish unless staff have monitor the patients’ pattern on a stool chart.

The guidance also acknowledges that no test or combination of tests is infallible and the clinical condition of the patient should always be taken into consideration when making management and treatment choices.

**Current position**

The Oxford University Hospitals (OUH) NHS Trust provides laboratory support in Oxfordshire and microbiology advice to the whole of Oxford Health NHS Foundation Trust. The OUH are conducting research studies in CDI infection and have identified approximately 50% false positive rates in the past. Some of this was due to the test and samples’ being taken before it was established that a patient had diarrhoea (4 or more episodes in 24hrs).

As a Trust we have reviewed the guidance and our management of CDI again.

The emphasis remains a clinical review of the patient, establishing what is normal for them and any risk factors. We have worked hard to reduce CDI cases in the Trust and have seen excellent reduction over the last 4 years.

There will be however, a point at which further reduction will be hard to achieve due to the nature and risk factors of the patients we treat and care for in the Trust. The complexity of our patient’s medical conditions and their underlying physical health requirements are increasing. Our older adult patients are all at high risk of developing CDI, none of these factors have been taken into consideration when the CDI trajectory was set for us by the PCT /SHA.

**Action being taken by Oxford Health NHS Foundation Trust**

**Specimen collection and results**

The reporting of specimen results is challenging as the Trust uses 5 different laboratories across our geography:

* All Director of Infection Prevention and Control (DIPC) for the 5 Trusts used by Oxford Health NHS Foundation Trust NHS Foundation Trust which are OUH, Buckinghamshire Healthcare, Milton Keynes Foundation Trust, Great Western (Swindon) and Royal Berkshire Hospital will be contacted to remind them about our services and the reporting for *C Diff*The letter will outline the process for the reporting of positive significant organism positive results.
* All SLA’s for laboratory services are being reviewed and will include Oxford Health NHS Foundation Trust’s expectation on reporting times, including out of hours results, so patients are be appropriately and safely managed.
* A specimen results flowchart is being developed to reflect the results information cascade and will be integrated into the specimen procedure.

**Action being taken by Oxford University Hospitals**

* The OUH have reviewed the Standard Operating Procedure for the processing of diarrhoeal specimens. This is after discussion with the DH, Health Protection Unit and Strategic Health Authority who have given guidance that only diarrheal samples where the diarrhoea is not clearly attributable to any other condition or therapy is tested. The DH has also stated that the recent guidance replaces the previous mandatory requirement to test all diarrhoeal stools for CDI from patients over the age of 65yrs. The OUH will now only test diarrhoeal stools from those over the age of 65yrs where CDI is requested.
* OUH will be analysing the changes in the testing regime to estimate the effect of changing from the Meridian test to the two stage test. It is possible this will result in an increase in cases.
* Further research is being proposed to analyse long-term trends of CDI in community hospitals and Oxford Health NHS Foundation Trust will be working collaboratively with the OUH to provide information. All new cases will be investigated with full sequence typing. This is innovatory and OUH particularly our consultant microbiologist Dr Derrick Crook is leading the field in this research, and working with DH on future policy guidance.

**Antimicrobial management**

* The medicines management lead (pharmacist) in the community division is working collaboratively with the OUH to develop prescribing guidelines for community hospitals.
* More integrated pharmacy services to be developed in the Trust. This will result in increased oversight of prescribing of antibiotics across all in patient wards.
* The clinical director of community services is working with the GP’s via the out of hours contracts to provide more robust and accountable prescribing.
* All RCA’s are reviewed by the clinical director and medicines management lead and any prescribing issues identified are followed up via a meeting with the prescriber.

**Patient management**

* Senior ward staff who are working in community hospitals and older adult mental health wards have received specific training regarding the safe and appropriate management of patients with suspected or confirmed CDI. This has been cascaded to staff via ward meetings.
* The SIGHT mnemonic has been reissued to all wards and staff are required to follow it when suspecting CDI.
* Further advice for CDI management has been provided by the Infection Prevention Control Team (IPCT) newsletter which is sent via comms to all staff quarterly. Back dated issues of the newsletter are available on the IPCT intranet page.
* A CDI refresher PowerPoint training session has been developed and is available on the IPCT intranet page for senior staff and infection prevention and control link practitioners to use and conduct in house refresher training.
* Access to casenotes for trained nurses has been increased and all trained nurses are expected to have access. This ensures patients are actively followed up and any further action taken in a timely manner if required.
* The specimen collection times are being reviewed and the process for sending specimens out of hours reviewed.
* The stocking of vancomycin on wards so patients can be commenced on appropriate treatment as soon as possible is being arranged.

**Assurance**

Following each CDI case the ward completes a full RCA (root cause analysis, based on the national tool) which is reviewed by the IPCT. An action plan identifying any learning points is developed and action taken by the clinical team. Each RCA and action plan is reviewed at the weekly clinical governance meeting.

In addition, we have participated in a peer review of these 4 CDI cases with our commissioning infection prevention and control lead, antimicrobial pharmacist and GP lead for Oxfordshire and the OUH infection control manager. It was confirmed that these cases were unavoidable and all patients were high risk and had received appropriately prescribed antibiotics.

Despite the above, the commissioners have requested we develop a CDI recovery action plan (attached) in order to get back on trajectory. The target for 2012-13 has been set by commissioners at 10 cases. Our end of year number of cases in 2011-12 was 15. This will prove to be very challenging, especially with the change in the CDI testing regime and the potential increase in reported cases. The contractual penalty is 2% of the community contract, which is £ 1.6 Million. The commissioners have agreed a 40% lea way can be applied above the 10 cases before the penalty will apply. This will equate to 14 cases.

MONITOR has confirmed that the governance rating for CDI remains green until the threshold of 14 cases is breached.

The progress made against reducing CDI between 2009-11 has been identified via the following graph.

***Clostridium difficile* Health Economy Recovery Plan**

Current position.

By the end of June 2012 there have been 4 confirmed cases of *Clostridium difficile* infections (CDI) within Oxford Health. There were 6 cases of CDI at the end of June 2011.

|  |  |
| --- | --- |
| April | 2 |
| May | 2 |
| June | 0 |
| July |  |
| August |  |
| September |  |

It should be recognised that the Trust’s end of year target contributes and is part of the overall Oxfordshire health economy target.

Oxford Health has a target of 10 cases, which is extremely challenging (2010/11 outturn was 15 cases) and that to remain on track there must be no cases in the next 3 months. The patients cared for in Oxford Health remain extremely high risk for development of CDI. There is a new 2 stage CDI test which has been introduced on 1st April 2012, which may affect the number of cases attributed to Oxford Health. The number of cases which have been seen in April and May in Oxfordshire are already higher than expected and therefore the test may well be increasing the number of cases, without patients experiencing CDI symptoms.

Recovery plan

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Issue | Action | Person responsible | By when  | Progress | RAG |
| 1 | Identify any learning from the 4 cases that occurred in April/May 2012 | All RCA’s and CDI cases to be reviewed. Identify common themes and issues | HB | June 2012 | Complete.RCA’s reviewed by Trust clinical governance committee |  |
| 2 | Identify any learning from the 4 cases that have occurred so far in 2012/13 | Complete and review RCA’s for all cases. Identify common issues and take appropriate action.Discuss and review RCA’s and action plans at weekly clinical governance meetings and follow up any learning by incidents | HB | June 2012 | Complete.RCA’s reviewed by Trust clinical governance committee |  |
| 3 | Inappropriate sampling as requested by GP | To reissue sampling guidance to wardsTo review medical contracts to ensure GP‘s are aware of Trust policies and procedures and adhere to them.. | HBPM/JC |  | Complete |  |
| 4 | Inappropriate antimicrobial prescribing | RCA’s will be reviewed by the medicines management lead or other appropriate professional.Any inappropriate practice will be followed up with the relevant prescriber and action and learning implemented.OOH prescribing practice being reviewed by the medicines management lead to ensure latest guidance is availableTo upload electronic copies of the pocket book antimicrobial guidelines so are available on all computer desk tops for easy access | Medicines management leadClinical Director/OOH manager | June 2012July 2012 | CompleteAny prescribing concerns discussed with clinician by the clinical director |  |
| 5 | Peer review of RCA’s | To review all RCA’s of new cases of CDI with clinical director, divisional nurse of community services and medicines management lead.To identify any common themes and implement appropriate action | HB, PMcG, JC and MB | June 2012 | In place |  |

Assurance

Reporting with be into clinical governance committee via the infection control report

Helen Bosley

Infection Prevention and Control Matron June 2012

**Summary**

Patients with true CDI have frequent episodes of diarrhoea (more than 4 episodes in 24 hours). Patients with unexplained diarrhoea will be fully assessed for possible causes and the SIGHT mnemonic algorithm used. Specimens will be sent by trained nurses and the result will be actively followed up the next working day and action taken if required. SLA and reporting arrangements will be reviewed by the 5 Trusts providing laboratory services in order to ensure significant results are received at the earliest opportunity so patients can be safely care for.

We will continue to work closely with our colleagues and if there are any changes in the future in national guidance or virulence of CDI cases our procedures will be reviewed.