

EXECUTIVE SUMMARY: BOARD OF DIRECTORS**15 JUNE 2011**

Subject:	Clostridium difficile (<i>C.diff</i>) Action Plan
Supporting Director:	Professor Hilary Chapman, Chief Nurse / Chief Operating Officer
Author:	Mr Chris Morley, Deputy Chief Nurse
Status (see footnote):	N

PURPOSE OF THE REPORT:

This report describes the current level of performance on *C.diff* and the actions that are being implemented to improve performance.

KEY POINTS:

- The Trust is not currently on the required trajectory to meet its *C.diff* target for 2011/2012.
- The target for the year is 134 and the Trust had recorded 46 cases by the end of May.
- There is no clear single cause for the higher rates of *C.diff* the Trust is currently experiencing. Contributory factors are environmental contamination, high occupancy rates, antibiotic prescribing and case mix.
- An action plan to reduce incidence is being implemented.

IMPLICATIONS:

Achieve Clinical Excellence	Need to maintain the Trust's reputation for high standards on infection control
Be Patient Focused	Important element of patient safety
Engaged Staff	Need to ensure that staff are aware of the current challenges regarding <i>C.diff</i>

RECOMMENDATION(S):

It is recommended that the Board of Directors note the current level of performance on *C.diff* and the actions that have been instigated to improve performance.

APPROVAL PROCESS:

Meeting	Presented	Approved	Date
Board of Directors			15 June 2011

Status: A = Approval
A* = Approval & Requiring Board Approval
D = Debate
N = Note

1. BACKGROUND

The Trust is not currently on the required trajectory to meet its *C.diff* target for 2011/2012. The *C.diff* target for 2011/2012 is 134 and the year to date position at the end of May was 46.

The purpose of this report is to describe the actions that are being taken by the Trust to reduce the incidence of *C.diff* within the Trust.

2. PERFORMANCE TO DATE

In summary, the performance for the last year, by quarter and quarter to date is as follows:

- Quarter 1 2010/2011 34 cases
- Quarter 2 2010/2011 50 cases
- Quarter 3 2010/2011 49 cases
- Quarter 4 2010/2011 51 cases

- Quarter 1 2011/2012 50 cases to date (8 June 2011)

3. CURRENT POSITION

The year to date performance on *C.diff* has STHFT currently 22 cases over trajectory at the end of May. The trajectory for the end of quarter 1 is 35 and that has already been exceeded. This leaves the Trust with a target of having no more than 88 cases for the remainder of the year, an average of just under 9 per month. Although the Trust has achieved this number of cases during one month in the last year, this has not been sustained over a number of months previously.

4. CAUSES OF THE CURRENT LEVEL OF PERFORMANCE ON *C.DIFF*

There is no clear single cause for the higher rates of *C.diff* the Trust is currently experiencing. The following contributory factors are considered as having an impact:

4.1 Environmental contamination

In Trusts that are showing improvements on *C.diff* performance above that seen in STHFT, they have targeted environmental decontamination by implementing a deep clean programme. It is believed that over time the environment becomes contaminated and so acquisition of infection is acquired from the environment, not from other patients directly or through healthcare workers. Although all of these Trusts employ normal standards of daily cleaning, they have found additional benefit from regularly emptying wards and deep cleaning them.

4.2 High Occupancy Rates

At both sites, the hospital has a high level of bed occupancy, with occupancy levels at the Northern General Hospital even higher. Whilst high usage of inpatient beds can be cost effective, some down time is required to ensure adequate cleaning and preparation of the bed and bed space for the next patient.

4.3 Antibiotic Prescribing

The production of *C.diff* toxin is associated with the use of antibiotics. Some antibiotics in particular increase the likelihood of patients developing *C.diff*. A recent review has highlighted that there has been an increase in the use of one of these drugs, Ciprofloxacin which may have impacted on the increase in the number of cases.

4.4 Case Mix

Whilst changes will be subtle, it is clear that the patient population attending and being treated at STHFT will be increasingly prone to developing infections such as *C.diff*. This is due to a combination of their underlying condition, the aggressive treatment they may require such as chemotherapy or suppressants to their immune system, or frailty associated with age.

5. C.DIFF ACTION PLAN

In order to address the issues highlighted above and to raise the level and profile of infection prevention and control, a series of actions (Appendix 1) is being implemented under the following headings:

- Reducing Contamination on High Risk Wards
- Optimising Infection Prevention and Control Practice
- Evidence Based Prescribing
- *C.diff* Case Follow Through and Actions
- Further raising the profile of Infection Prevention and Control
- Monitoring

6. GOVERNANCE ARRANGEMENTS

The following governance arrangements are in place to monitor compliance with the *C.diff* target:

- STHFT Board of Directors receives a regular monthly update on performance on infection prevention and control including *the C.diff* target.
- The Healthcare Governance Committee also reviews progress on infection prevention and control monthly including progress against the *C.diff* target. They also receive quarterly updates regarding the progress with the implementation of the infection control programme 2011/2012.
- Detailed discussion about the *C.diff* target, action plans, antibiotic prescribing and cleanliness takes place at the Trust Infection Control Committee held quarterly.
- The monthly operational meeting of the Infection Control team includes discussion regarding operational issues relating to the achievement of the target.

7. SUMMARY

The Trust is not currently on trajectory to deliver the *C.diff* target for 2011/2012, following the failure to meet the required trajectory in quarter 1, a series of actions has been instigated to reduce the prevalence of *C.diff* cases within the Trust.

CLOSTRIDIUM DIFFICILE ACTION PLAN

Action plan to address the rise in cases of *Clostridium difficile* (*C.diff*) at Sheffield Teaching Hospitals NHS Foundation Trust

ACTION		KEY MILESTONES	PERSON RESPONSIBLE	RISK ASSESSMENT	COMMENTS
1	Reducing Contamination on High Risk Wards				
1.1	Identify the wards that have had the highest incidence of <i>C.diff</i> in the previous 2 years.	31 May 2011	Director of Infection Prevention and Control	Low	Achieved
1.2	Produce a phase 1 deep clean programme to deliver a deep clean to the high risk wards at the Northern General Hospital, to be done bay by bay.	31 May 2011	Deputy Chief Nurse	Low	Achieved
1.3	Produce a phase 1 deep clean programme to deliver a deep clean to high risk wards at the Royal Hallamshire Hospital using a decant ward.	30 June 2011	Deputy Chief Nurse	Low	Achieved
1.4	Building on the existing deep clean team, recruit further staff to enable the deep clean programme to be delivered at the Royal Hallamshire and Northern General Hospitals using the Cambridge model.	30 November 2011	Director of Hotel Services	Medium	The Cambridge model has a team which perform functions currently undertaken by our Domestic Services, Estates and Infection Control Team
1.5	Reconfigure services to enable a vacant ward to become available at the Northern General Hospital site to be used as a decant ward for the deep clean programme.	30 September 2011	Deputy Chief Operating Officer	High	
1.6	Produce a phase 2 deep clean programme.	30 June 2011	Deputy Chief Nurse	Low	

	ACTION	KEY MILESTONES	PERSON RESPONSIBLE	RISK ASSESSMENT	COMMENTS
2	Optimising Infection Prevention and Control Practice				
2.1	All areas across the Trust to undertake monthly commode and <i>C.diff</i> care bundle audits.	30 April 2011	Deputy Chief Nurse	Low	Achieved
2.2	For high risk wards, an infection prevention and control review is to be completed for each month and a score of higher than 85% to be achieved.	31 May 2011	Deputy Chief Nurse	Low	Achieved
2.3	An audit of the cleanliness of commodes is to be undertaken weekly and submitted centrally to the Infection Prevention and Control team. Standard to be achieved is 100%.	31 May 2011	Deputy Chief Nurse	Low	Achieved
2.4	A statement on the importance of hand hygiene and adhering to the rules on 'bare below the elbow' to be prepared and disseminated from the Medical Director's Office.	30 June 2011	Medical Director	Low	Achieved
2.5	Commodes on every ward in the Trust to be inspected by the Infection Prevention and Control team and any commodes felt to be unsuitable to be condemned and replaced.	31 July 2011	Deputy Chief Nurse	Low	Achieved
2.6	Every ward area to be cleaned in all areas using Chlorclean during the first week of each month.	30 April 2011	Deputy Chief Nurse	Low	Achieved
2.7	To trial the use of a new cleaning solution, DIFFICIL-S® .	31 August 2011	Deputy Chief Nurse	Low	The trial is to establish whether it can be used effectively in STHFT, not its efficacy.
2.8	Temporarily expand the Infection Control Nursing team to help to monitor and audit Infection Prevention and Control practice across the Trust and support the Deep Clean Team by providing HPV support.	31 July 2011	Deputy Chief Nurse	Low	

	ACTION	KEY MILESTONES	PERSON RESPONSIBLE	RISK ASSESSMENT	COMMENTS
2.9	For the enhanced <i>C.diff</i> ward Matron to visit every high risk ward and provide support to the Ward Manager.	31 July 2011	Deputy Chief Nurse		The enhanced <i>C.diff</i> ward is Robert Hadfield 4.
3	Evidence Based Prescribing				
3.1	Ciprofloxacin to be removed from inpatient areas, except for a very few clinically appropriate areas.	30 June 2011	Medical Director	Low	Achieved
3.2	Antibiotic prescribing will be audited quarterly as part of the Infection Control Accreditation.	31 July 2011	Director of Infection Prevention and Control	Low	
3.3	The inpatient prescription chart is to be amended to include a specific section on antibiotic prescribing.	31 August 2011	Director of Pharmacy	Low	
3.4	Guidance will be issued to the Medical Assessment Unit to reduce the use of Co-amoxiclav, except in those places where it is clearly indicated.	31 July 2011	Director of Infection Prevention and Control	Low	
3.5	Implement guidelines on the prescription and rationalisation of proton pump inhibitors.	31 July 2011	Medical Director		Proton pump inhibitors suppress the production of acid in the stomach and are therefore sometimes associated with <i>C.diff</i> infections.
4	<i>C.diff</i> Case Follow Through and Actions				
4.1	Any case of <i>C.diff</i> to be followed by an extended clean of the bed space, toilet, dirty utility rooms and nurses' station.	30 June 2011	Director of Hotel Services	Low	Achieved
4.2	IPC Team to produce Root Cause Analysis tool for clinical areas to use following cases of <i>C.diff</i> .	30 June 2011	Director of Infection Prevention and Control	Low	Root Cause Analysis will allow a better understanding of why a patient may have developed <i>C.diff</i> .

	ACTION	KEY MILESTONES	PERSON RESPONSIBLE	RISK ASSESSMENT	COMMENTS
4.3	Lessons learnt disseminated across the organisation.	30 September 2011	Director of Infection Prevention and Control	Low	
4.4	Cases of <i>C.diff</i> to be subject to a department based Root Cause Analysis to be returned centrally.	31 July 2011	Director of Infection Prevention and Control	Low	
5	Raising the Profile of Infection Prevention and Control				
5.1	A series of <i>C.diff</i> summits will be held, chaired by the Chief Executive and involving Nurse Directors, Clinical Directors, Lead Nurses, Matrons and Ward Managers for the high risk ward, to outline the current situation and the plans required to improve performance on <i>C.diff</i> .	30 June 2011	Chief Executive	Low	First summit held on 8 June 2011
5.2	Internal communication strategy will be developed and implemented.	31 July 2011	Director of Communications	Low	
5.3	Clinical leadership walk rounds will take place involving the Chief Executive Officer, Chief Nurse / Chief Operating Officer and Medical Director.	31 August 2011	Deputy Chief Nurse	Low	
5.4	Infection control to be discussed in the first hour of the following Trust meetings: <ul style="list-style-type: none"> - Board of Directors - Healthcare Governance Committee - Trust Executive Group - Clinical Management Board - Operational Board 	31 July 2011	Trust Secretary	Low	

	ACTION	KEY MILESTONES	PERSON RESPONSIBLE	RISK ASSESSMENT	COMMENTS
6	Monitoring				
6.1	A weekly email will be sent to Clinical Directors, Medical Infection Prevention and Control leads, Nurse Directors, Matrons and Lead Nurses from the Director of Infection Prevention and Control regarding the number of <i>C.diff</i> cases recorded each week.	31 May 2011	Director of Infection Prevention and Control	Low	
6.2	A daily email will be sent from the Director of Infection Prevention and Control to the Clinical Directors, Medical Infection Prevention and Control leads, Nurse Directors, Matrons, Lead Nurses and Ward Managers responsible for high risk wards detailing the cases recorded.	30 June 2011	Director of Infection Prevention and Control	Low	