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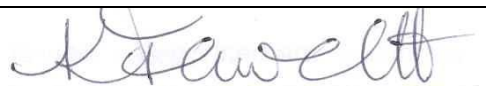
AGENDA ITEM NO:

UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST
COUNCIL OF GOVERNORS
WEDNESDAY 16 MAY 2012

Title:	**REPORT ON INFECTION PREVENTION AND CONTROL FOR MARCH 2012**
Responsible Director:	Kay Fawcett, Executive Chief Nurse and Executive Director for Infection Prevention and Control
Contact:	Dr Pauline Jumaa, Director of Infection Prevention and Control. Ext 16175

Purpose:	To provide the Chief Executive with information relating to infection prevention and control issues (including MRSA bacteraemias, MSSA bacteraemias and episodes of *Clostridium difficile* infection) up to the 30 April 2012.
Confidentiality Level & Reason:	**Confidential - Patient Information**
Annual Plan Ref:	Strategic Aim 4 : Quality of Services
Key Issues Summary:	This paper sets out the position for the 2011/2012 MRSA bacteraemia and *Clostridium difficile* infection trajectories and provides incidence of MSSA and *E. coli* bacteraemia within the Trust and supporting actions to ensure continued improved performance.
Recommendations:	The Council of Governors are asked to accept this report on infection prevention and control progress.

Signed: 	**Date:** 04 May 2012

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UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST

COUNCIL OF GOVERNORS
WEDNESDAY 16 MAY 2012
REPORT ON INFECTION PREVENTION AND CONTROL UP TO 30 APRIL 2012
PRESENTED BY THE EXECUTIVE CHIEF NURSE

1. Introduction

This paper provides a report on performance against the 2012/2013 national objective for meticillin-resistant *Staphylococcus aureus* (MRSA) bacteraemia and the locally agreed objective for *Clostridium difficile* infection (CDI), up to 30 April 2012. It provides an update on performance for meticillin-sensitive *Staphylococcus aureus* (MSSA) and outlines reporting requirements for *Escherichia coli* (*E. coli*) bacteraemia while identifying progress related to wider infection prevention and control actions.

2. Executive Summary

The annual objective for MRSA bacteraemia is 5 cases. Performance in April to date is 1 case, placing the Trust under year to date trajectory by 4 cases. The annual objective for CDI is 76 cases. In April, the Trust implemented a two-stage laboratory test for the detection of toxigenic *C. difficile* in line with Department of Health (DH) guidance. This combination of tests is known to be more sensitive and this has been reflected in an increase in rate of toxigenic *C. difficile* detection. Performance for April is 19 post 48 hour cases. The DH guidance provides requirement for mandatory reporting following the implementation of a two-stage test and in accordance with this only 7 of these will be apportioned to the Trust and count against the annual objective.

As part of the contract quality schedule for Infection Prevention & Control (IP&C) in 2012/2013 the Trust will be required to report 30 day all cause mortality for CDI. Patient deaths within 30 days of a toxigenic *C. difficile* result will be reviewed at the Clinical Quality Monitoring Group.

There were no multi-drug resistant (MDR) Acinetobacter in April. There has been 1 case of to date in May. This was identified on the Burns Unit.

All incidences of MSSA and *E. coli* bacteraemia continue to be reported in line with Health Protection Agency (HPA) mandatory reporting requirements. All cases of MRSA bacteraemia and CDI continue to be reviewed through root cause analysis (RCA) investigation and practice improvement in the Divisions concerned.

3. MRSA Bacteraemia Rates

3.1 MRSA bacteraemias 2012/13 and Context

There has been 1 post 48 MRSA bacteraemia in April placing the Trust 4 cases under an annual objective of 5 cases. Figure 1 shows the trend of improvement in MRSA bacteraemia over the last three years. The monthly incidence of MRSA bacteraemia is shown in Table 1.

Figure 1. Annual rolling total of MRSA bacteraemias against annual objective (2009 - 2013)

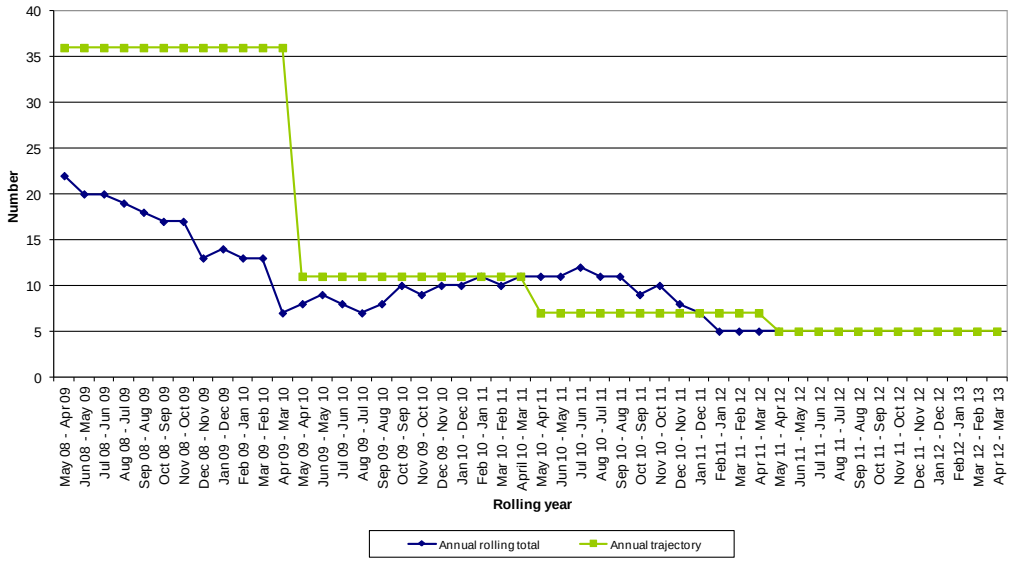

Table 1. Monthly number of MRSA bacteraemia by month up to 30 April 2012

Month	Total bacteraemia	Objective (post 48 hour cases only)	Bacteraemia acquired more than 48 hrs after admission? (likely to be UHB acquired)	
			Yes	No
April 2012	1	**0.4**	1	0
Total	**1**	**5.0**	**1**	**0**

3.2 Actions to improve performance for MRSA bacteraemia 2012/2013

Continued focus on clinical practice is required to meet this objective. Actions will include:

- Consultation with clinical staff to standardise the recording of all invasive devices on the prescribing, information and communication system (PICS)
- Improving the clinical management of invasive devices in accordance with the Trust standard
- Continue to focus on surgical site infection to identify and apply improvement strategies

- Continue to support Divisional staff to improve the inter-department communication in relation to the movement of patient with known infections.
- Continue to improve screening compliance for long-stay patients.

4. Episodes of Toxigenic *C. difficile* Infection (CDI)

4.1 Historical Context and Current Figures

The annual CDI objective of for 2012/2013 is 76 cases. In April, the Trust implemented a two-stage laboratory test for the detection of toxigenic *C. difficile* in line with DH guidance. This combination of tests is known to be more sensitive and this has been reflected in an increase in the rate of toxigenic *C. difficile* detection in April. Performance for, April to date is 19 post 48 hour cases, 7 of which are reportable to the HPA.

The DH guidance also states that where a Trust can demonstrate that any breach in the CDI objective is shown to be as a direct result of introducing the new testing regime, they should not be penalised. It is imperative that the Trust can demonstrate that the standard of patient management has remained constant and has not contributed to a breach in the CDI objective. Figure 2 shows the trend of improvement in CDI over the last three years. The monthly incidence of CDI is shown in Table 2.

Figure 2. Annual rolling total of *C. difficile* infection cases at UHBFT against annual objective (2009 - 2013)

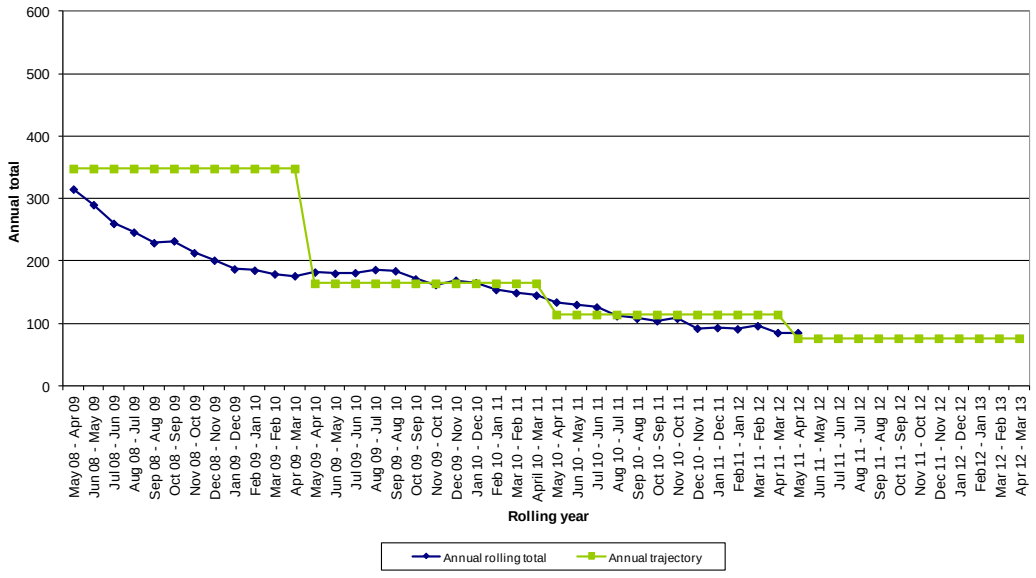

Table 2. Monthly number of cases of CDI within the Trust up to 30 April 2012

Month	Total number of CDI	Objective (post 48 hour cases only)	CDI acquired more than 48 hours after admission? (likely to be UHB acquired)		Number of post 48 hour CDI cases reportable to the HPA
			YES	NO	
April 2011	27	**6.3**	19	8	7
Total	**27**	**76**	**19**	**8**	**7**

4.2 Actions to improve performance for CDI 2012/2013

Continued focus and challenge will be required to maintain current performance for CDI and ensure the Trust meets the 2012/2013 annual objective of 76 cases. Actions will include:

- Rapid isolation of any patient presenting with type 6/7 stool
- Clinical focus on patient assessment to identify infective diarrhoea and daily review of all medications especially antimicrobials and proton pump inhibitors for all patients presenting with type 6/7 stool
- Refine prescribing audits and clinical feedback cycles to support antimicrobial stewardship
- Rapid review of any area reporting two or more cases of CDI
- Adherence to environmental cleaning standards
- Support for all clinical staff on the identification and management of patients with type 6/7 stool and toxigenic *C. difficile*
- Review of all CDI deaths within 30 days of a toxigenic *C. difficile* result at Clinical Quality Monitoring Group.

4.2 Facilities Update

- An annual deep clean plan is being developed initially focusing on high-risk areas
- In response to the new DH guidelines for the management of *Pseudomonas* in augmented care we are ensuring our housekeeping staff are trained in the correct cleaning techniques for wash hand basins.
- A recent task and finish group to monitor the standard of cleanliness in public areas has been set up.
- As part of the deep clean programme cubical curtains are now being dated when changed.

5. Surgical Site Infection (SSI)

5.1 Current Position and Historical Context

The Trust is taking part in the Health Protection Agency (HPA) voluntary Surgical Site Infection (SSI) surveillance. Audit of plastic surgery will commence in May. This will be rolled out to general surgery in July 2012.

Actions implemented to date include:

- Audit of prescription and administration of surgical prophylaxis across all types of surgery is in progress
- Audit of skin preparation across all specialties is complete
- Recruitment of a surveillance nurse to set up audit programme

6. Other Alert Organisms

6.1 Multi Drug Resistant (MDR) - *Acinetobacter*

Following the 5 cases of MDR-*Acinetobacter* identified in March, there were no new cases in April. There has been 1 new case in May to date in the Burns Unit. Improvement actions continue to be imbedded in Critical Care and the Burns Unit.

6.1.1 Actions to improve performance for MDR-*Acinetobacter*

WCCB

- Daily IP&C/House Keeping Supervisor walk around
- Development of an annual programme
- Daily hand hygiene audits and compliance feedback continue
- Audits on adherence to Trust procedure for personal protective clothing (PPE) continue
- Enhanced surveillance for MDR microorganisms from WCCB is continues in the laboratory

Burns Unit

- A review to standardise dressing changes across Critical Care and Burns is in progress
- A hydrogen peroxide misting protocol is being finalised and will be implemented in the Burns Unit
- Hand hygiene compliance is being reviewed by the Divisional IP&C nurse who is undertaking education and training as required

6.2 Meticillin-sensitive *Staphylococcus aureus* (MSSA) bacteraemia

Reporting of MSSA bacteraemia has been mandatory since 1 January 2011. Performance up to the 30 April is 3 cases, 3 of which are Trust apportioned.

6.3 *Escherichia coli* (*E. coli*) bacteraemia

From 1 June 2011, reporting of *E. coli* bacteraemia has been mandatory. *E. coli* is part of the normal bacterial flora carried by all individuals. It is the commonest cause of clinically significant bloodstream infection. *E. coli* bacteraemia represents a heterogeneous group of infections. Performance up to 30 April is 12 Trust apportioned and 12 non-Trust apportioned cases.

7. Outbreaks of Diarrhoea and Vomiting

There have been no outbreaks of diarrhoea and/or vomiting in April.

8. Root Cause Analysis

All episodes of MRSA bacteraemia and CDI are subject to an RCA investigation. All post 48 hour MRSA bacteraemias and CDI deaths are being reviewed by the executive panel in conjunction with drug omissions and complex complaints. Pre 48 hour MRSA bacteraemias, CDI and GRE RCAs continue to be reviewed by Divisional panels.

9. Recommendations

The Council of Governors are asked to accept this report on infection prevention and control progress.

Mrs Kay Fawcett
Executive Chief Nurse and Executive Director for
Infection Prevention and Control

04 May 2012