UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST
BOARD OF DIRECTORS
THURSDAY 25 JULY 2013

Title:	**REPORT ON INFECTION PREVENTION AND CONTROL UP TO 30 JUNE 2013**
Responsible Director:	Kay Fawcett, Executive Chief Nurse and Executive Director for Infection Prevention and Control
Contact:	Dr Beryl Oppenheim, Director of Infection Prevention and Control. Ext 16523

Purpose:	To provide the Chief Executive with information relating to infection prevention and control issues (including the reportable cases of MRSA bacteraemia, MSSA bacteraemia and episodes of *Clostridium difficile* infection) up to 30 June 2013.	
Confidentiality Level & Reason:		
Annual Plan Ref:	Strategic Aim 4 : Quality of Services	
Key Issues Summary:	This paper sets out the position for the 2013/2014 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 Board of Directors are asked to accept this report on infection prevention and control progress.	
Approved by:	Kay Fawcett	Date: 10 July 2013

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REPORT ON INFECTION PREVENTION AND CONTROL UP TO 30 JUNE 2013

PRESENTED BY THE CHIEF NURSE

1. Introduction

This paper provides a report on performance against the 2013/2014 objectives for meticillin-resistant *Staphylococcus aureus* (MRSA) bacteraemia and *Clostridium difficile* infection (CDI), up to 30 June 2013. It provides an update on performance for meticillin-sensitive *Staphylococcus aureus* (MSSA) bacteraemia and outlines reporting requirements for *Escherichia coli* (*E. coli*) bacteraemia while identifying related infection prevention and control actions. It also provides the high level action plan for infection prevention and control for April 2013 to March 2014 (Appendix 1).

2. Executive Summary

The annual objective for MRSA bacteraemia is 0 avoidable cases. During June 2013 there were no cases of MRSA bacteraemia which means we have no Trust apportioned cases to date this financial year. The new system of urgent post-infection reviews for MRSA bacteraemia is now in place for use following a positive bacteraemia being reported.

The annual objective for CDI for 2013/14 is 56 cases. Performance for June was 7 Trust apportioned post 48 hour cases, all of which were reportable to the HPA in accordance with Department of Health guidance. However with agreement from commissioners all cases are being reviewed against avoidability criteria, those deemed unavoidable are being excluded from consideration of local penalties.

Following the apparent importation of a multi drug resistant Acinetobacter and likely transmission to three patients in April and two patients in May there was a further probable transmission during June 2013. Investigation and implementation of a number of infection prevention initiatives is ongoing. In addition we had another new case admitted in June who had previously been hospitalised abroad.

All incidences of MSSA and *E. coli* bacteraemia continue to be reported in line with the HPA mandatory reporting requirements.

3. Incidents of MRSA Bacteraemia

3.1 MRSA bacteraemias 2013/14

There were no cases of MRSA bacteraemia during June resulting in zero cases to date this financial year. Figure 1 shows the number of Trust apportioned cases of MRSA against the monthly trajectory (April 2011 – current). Monthly incidence of MRSA bacteraemias to date is shown in Table 1.

Figure 1: Number of Trust apportioned MRSA cases at UHBFT against the monthly trajectory (April 2011-current).

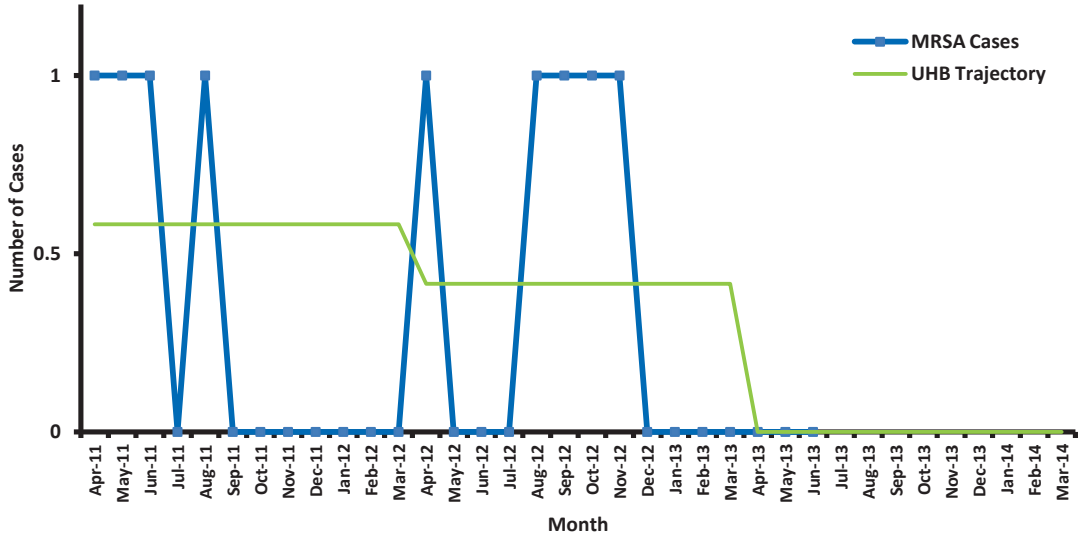

Table 1. Monthly number of MRSA bacteraemias at UHBFT up to the 30th June 2013.

Month	Total bacteraemia	Time of bacteraemia acquisition?	
		Pre (<48 hrs)	Post (>48 Hrs) Trust apportioned
April 2013	1	1	0
May 2013	0	0	0
June 2013	0	0	0
Total	**1**	**1**	**0**

Note: Objective for the financial year 2013/14 is 0 avoidable cases.

3.2 Actions to improve performance for MRSA bacteraemia 2013/2014

Continued focus on clinical practice is required to maintain current performance and meet this objective. Issues being addressed at the present time are:

- Improving the clinical management of invasive devices in

accordance with the Trust standard, including ensuring the availability of more long term access for patients who are likely to encounter difficulties with peripheral venous cannulae.

- Ensuring the optimal management of all patients with MRSA colonisation and infection.

- Development of surveillance systems for surgical site infections to identify and apply improvement strategies.

- Supporting Divisional staff to improve inter-departmental communication in relation to the movement of patients with known infections.

- Improving screening compliance, especially for long-stay patients.

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

4.1 Current Figures

The annual CDI objective for 2013/2014 is 56 cases; following the introduction of a new review tool with local commissioners unavoidable cases will be discounted for the purposes of locally agreed penalties. Performance for June 2013 was 10 reportable cases of which 7 were post 48 hours and attributable to the Trust. Figure 2 shows the number of Trust apportioned cases of CDI against the monthly trajectory (April 2011 – current). Monthly incidence of CDI to date is shown in Table 2.

Figure 2: Number of Trust apportioned cases of CDI at UHBFT against the monthly trajectory (April 2011-current).

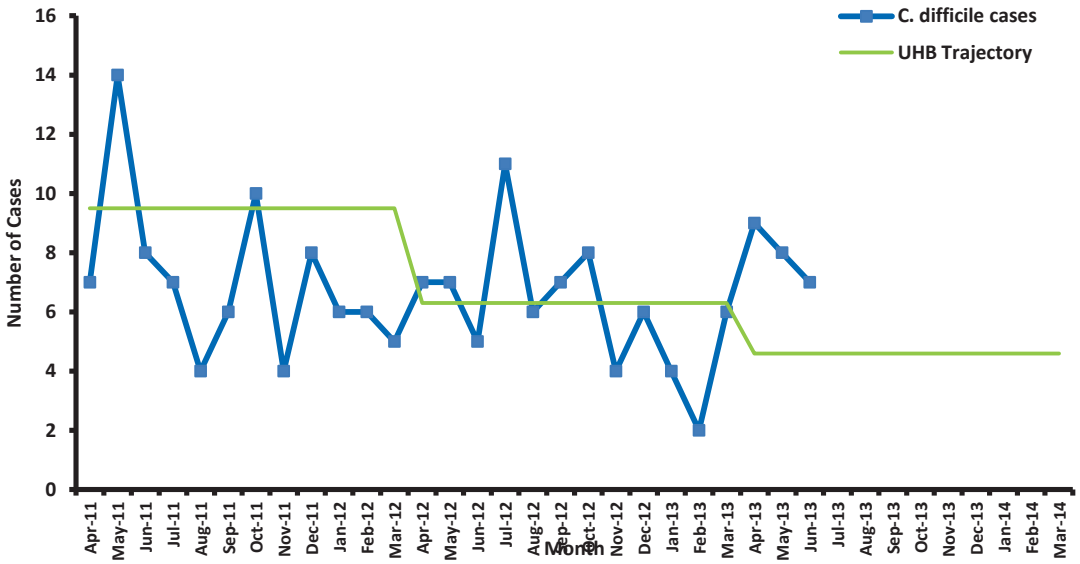

Table 2. Monthly number of CDI cases at UHBFT up to the 31 June 2013.

Month	Total number of CDI	Objective (post 48 hr cases only) Monthly/ (annual)	Time of CDI acquisition		Trust apportioned cases discounted on avoidability criteria	Trust apportioned cases
			Pre (<48 hrs)	Post (>48 Hrs) Trust apportioned		
April 2013	10	4.6	1	9	7	2
May 2013	12	4.6	4	8	6	2
June 2013	10	4.6	3	7	4	1(+ 2 decisions delayed pending further information)
Total	**32**	**13.8 (56)**	**8**	**24**	**17**	**5(+2 pending)**

4.2 Actions to improve performance for CDI 2013/2014

Continued focus and challenge will be required to achieve these difficult objectives regardless of systems to exclude certain cases on avoidability grounds. Particular areas to focus on in the immediate future include:

- Ensuring multi-disciplinary review of patients bowel management procedures and the appropriateness of stool sampling with clear documentation of the decision making process.

- Maintaining an antimicrobial stewardship programme which includes: ensuring that antibiotic prescribing is in line with Trust guidelines; mandating the requirement for a written indication for every antibiotic prescription; and ensuring and documenting an early review of the continuing appropriateness of each prescription.

- Ensuring clear and accurate documentation of all aspects of the pathway for cases of CDI.

- Continuation of the rapid reviews by the IP&C team of any area reporting two or more cases of CDI.

- Environmental monitoring to ensure adherence to environmental cleaning standards.

- During April - June 2013, due to the higher than expected numbers of cases of CDI, 10 samples were submitted for ribotyping. Results received to date show 7 different strains, none of them of known epidemic potential, three samples were ribotype

045 from patients who had not been on the same wards. However further investigations revealed two of these ribotype 045 patients had spent time in another healthcare organisation and may be related to a cluster of cases in that organisation.

4.3 Facilities Update

- The environmental monitoring of clinical areas through the monitoring audits continues to exceed the 95% compliance requirements.
- Support for additional enhanced cleaning on all areas supporting burns patients continues to be a priority as part of the MDR Acinetobacter action plan.
- We have purchased a further 'misting' device for use in Critical Care areas to support the Critical Care rapid response team and the turnaround of beds.

5. Other Alert Organisms

5.1 Multi Drug Resistant (MDR) - *Acinetobacter*

During April there was an apparent importation of a new strain of MDR Acinetobacter followed by transmission to three patients, in May there was further transmission to two patients, followed by another probable transmission in June. This continues to be investigated and significant further infection prevention initiatives have been implemented in the areas concerned. These are focussing on basic infection control, isolation of infected and colonised cases, hand hygiene, and cleaning of the environment and equipment. In addition we had a new isolation of a different strain of MDR Acinetobacter in a patient who had been transferred from a hospital abroad.

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

Reporting of MSSA bacteraemia has been mandatory since 1 January 2011. Performance for June 2013 is 8 cases, 4 of which were Trust apportioned.

5.3 *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 for June 2013 is 7 Trust apportioned and 19 non-Trust apportioned cases.

6. Outbreaks of Diarrhoea and Vomiting

There were no wards closed with outbreaks of diarrhoea and/or vomiting in June 2013.

7. Serious Incidents Requiring Investigation (SIRI) related to Infection Prevention & Control

All MRSA bacteraemia, and CDI cases that result in death (Part 1 of the death certificate) or surgery, are reported as Serious Incidents Requiring Investigation (SIRIs). Those deaths on Part 2 of the certificate are of patients considered to have died *with* MRSA or CDI rather than *of* it. There have been no MRSA deaths reported on Part 1 or 2 of the death certificate for June 2013. However there have been 2 CDI deaths reported on Part 1 (1A and 1C respectively) of the death certificate for June 2013.

8. Recommendations

The Board of Directors 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

10 July 2013

Appendix 1 - Healthcare Associated Infection Delivery Plan University Hospitals Birmingham NHS Foundation Trust: April 2013 to March 2014

Corporate Objective	Operational actions required	Executive Lead	Operational Lead	Review cycle	Red Amber Green	Progress
1. To achieve a high standard of clinical care delivery that supports adherence to the Trust IP&C policy and associated procedures and reduces the risk of Healthcare Associated Infection (HCAI)	The infection prevention & control (IP&C) team will support the implementation of the new Department of Health guidance 'Zero Tolerance to avoidable MRSA bacteraemia'	Kay Fawcett	Joanne Ellison	Monthly at IPCC		Systems in place to support implementation of guidance however to date Trust has not had UHB apportioned case of MRSA bacteraemia
	The IP&C team will lead a review of the Trust MRSA screening process and support the implementation of change in accordance with anticipated national guidance	Kay Fawcett	Beryl Oppenheim	Monthly at IPCC		Some national guidance now available. Discussion paper on the way forward to be tabled at July IPCC.
	The IP&C team will continue to focus on supporting clinical staff to ensure a clear focus on multidisciplinary assessment of all patients presenting with type 5/6/7 stool, including daily review of antimicrobial therapy, aperient therapy and proton pump inhibitors	Kay Fawcett	Joanne Ellison	Monthly at IPCC		Daily review of stool sample continues, clinical staff support given around care of patients with diarrhoea.
	Continue to improve the time to isolation for patients presenting with type 5/6/7 stool	Kay Fawcett	Divisional ADNs	Monthly at IPCC		IP+C team review isolation and have seen improvements over time.
	The Director of IP&C (DIPC) will continue to submit monthly data in on meticillin-sensitive *Staphylococcus aureus* (MSSA) and *Escherichia coli* (*E. coli*) bacteraemia in line with Mandatory reporting requirements	Kay Fawcett	Beryl Oppenheim	Monthly at IPCC		Monthly data continues to be submitted in line with national guidance.
	The IP&C team will work with clinical staff to support winter preparedness ahead of the seasonal pressures including seasonal influenza and Norovirus	Kay Fawcett	Beryl Oppenheim	Monthly at IPCC		Plans for winter preparedness in an advanced stage to include in house testing for norovirus.
	The IP&C nurse team to support local Back to the Floor (B2TF) reviews as part of the	Kay Fawcett	Joanne Ellison	Monthly at IPCC		IP&C team attend BTTF as part of MDT

	multidisciplinary team.					
Corporate Objective	**Operational actions required**	**Executive Lead**	**Operational Lead**	**Review cycle**	**Red Amber Green**	**Progress**
	The IP&C team will undertake immediate review following two cases of CDI in the same clinical area. This will include review of: • Environmental cleanliness • Hand hygiene compliance • Compliance to use of PPE • Patient isolation procedures • Environmental clutter • Observations of practice	Kay Fawcett	Joanne Ellison	Monthly at IPCC		Process instigated when 2 or more cases. Only 1 area where this has occurred in the first quarter
	Improve compliance to Trust hand hygiene procedures across all staff groups and among patients and visitors	Kay Fawcett	Joanne Ellison	Monthly at IPCC		Monitored at IPCC all divisions over 95%.
	The DIPC will support clinical staff with the robust implementation of national guidance on variant Creutzfeldt-Jakob Disease (vCJD)	Kay Fawcett	Beryl Oppenheim	Monthly at IPCC		New local guidance being developed in line with revised national guidance.
	The DIPC will lead the development and implementation of a programme of enhanced surveillance for multi-drug resistant microorganisms	Kay Fawcett	Beryl Oppenheim & ADIPC	Monthly at IPCC		Enhanced surveillance in place and any multiply resistant organisms reported via monthly reporting process
	Identify, review and reduce the incidence invasive device associated infections at UHBFT through a re-focus on aseptic non-touch technique and continued improvements in the management of invasive devices	Kay Fawcett	Beryl Oppenheim & Debby Edwards	Monthly at IPCC		A DVD to be used as an educational tool for clinical skills in ANTT has been developed and will be rolled out to be available on the Trust intranet. Audits continue to show sustained good practice in relation to invasive devices.
	The Trust will continue to submit monthly data on urinary tract infection and urethral catheter use as part of the national Safety Thermometer	Kay Fawcett	ADIPC & Joanne Ellison	Monthly at IPCC		Monthly data continues to be submitted
	The Trust will develop and implement an improvement programme to improve the clinical management of urethral catheters and	Kay Fawcett	ADIPC & Joanne Ellison	Monthly at IPCC		IP + C team carry out safety thermometer monthly. Any areas of concern discussed with

	them reduce catheter associated complications					Continence Specialist Nurse. Plan to form a group to look at pulling all urinary catheter related data together.
	The Deputy Medical Director & the DIPC will support the implementation of surgical site infection surveillance programme	Kay Fawcett	DIPC & Mike Hallissey	Monthly at IPCC		Mandatory T&O surveillance continues. In addition we have piloted surveillance of cardiac surgery with results to be presented at an appropriate governance meeting and will start surveillance of selected plastic surgery cases in coming quarter.
Corporate Objective	**Operational actions required**	**Executive Lead**	**Operational Lead**	**Review cycle**	**Red Amber Green**	**Progress**
2. To achieve a high standard of environmental cleanliness which reduces the risk of Healthcare Associated Infection (HCAI)	Maintain agreed standards of environmental cleanliness through robust monitoring, feedback and improvement cycles where indicated.	Kay Fawcett	Karen Johnson	Monthly at IPCC		Environmental monitoring is carried out by the Contracts Team and reports are sent to IPCT and Facilities team for action. These are reported to IPCC.
	Implement and participate in the new Department of Health approach to annual environmental review 'Patient Led Assessment of the Care Environment' (PLACE)	Kay Fawcett	Karen Johnson	Annually at IPCC		The Annual PLACE visit was completed on 3rd May 2013 and the results have been submitted. The scores will be released in September.
	The IP&C team will work with the New Hospitals Team to ensure IP&C guidance considered in all planned refurbishment of retained estate and at every stage of planning in line with national guidance	Kay Fawcett	Karen Johnson & Joanne Ellison	Monthly at IPCC		All new and refurbishment work is discussed with the IPC team to ensure compliance
	The DIPC and Operational Director for Corporate Nursing will Lead on the implementation of new national guidance for the control of *Pseudomonas aeruginosa* in augmented care	Kay Fawcett	Beryl Oppenheim & Karen Johnson	Monthly at IPCC		Water Quality Group now in place. Regular reporting of surveillance and actions monthly to IPCC.
	The Associate Director of Facilities will Lead	Kay Fawcett	Campbell	Monthly		Annual deep clean

Appendix 1 - Healthcare Associated Infection Delivery Plan University Hospitals Birmingham NHS Foundation Trust: April 2013 to March 2014

	the implementation of the annual deep clean programme		Strefford	at IPCC		programme in progress and will be reported through IPCC
	The Operational Director for Corporate Nursing and the DIPC will jointly lead on ensuring the Trust is compliant with national requirements for decontamination	Kay Fawcett	Karen Johnson & Beryl Oppenheim	Monthly at IPCC		The Operational Director chairs the Decontamination Group and the DIPC is a member to ensure national requirements are met.
Corporate Objective	**Operational actions required**	**Executive Lead**	**Operational Lead**	**Review cycle**	**Red Amber Green**	**Progress**
3. To achieve compliance with prudent prescribing which supports the Trust antimicrobial stewardship programme	Implement a programme of audit that supports delivery of Department of Health audit standards (standard 2)	Kay Fawcett	Martin Gill & Inderjit Singh	Monthly at IPCC		Audit programme in place, first set of audits achieves compliance with KPI for DH Standard 2
	Provide antimicrobial prescribing data to clinicians in an informative way and in a timely manner to support prudent prescribing	Kay Fawcett	Martin Gill & Inderjit Singh	Monthly at IPCC		Data presented at Antimicrobial Steering Group and first set of audit data to be presented to July IPCC
	Develop the clinical pharmacy structure to ensure the Trust can achieve antimicrobial stewardship	Kay Fawcett	Martin Gill & Inderjit Singh	Monthly at IPCC		Band 8b Antimicrobial Pharmacist JD completed and post to be advertised in coming weeks. Part time support from substantive Band 8a post now in place.
4. To achieve a high standard of clinical care delivery that supports an annual reduction in the incidence of all Healthcare Associated Infection (HCAI) in patients accessing UHBFT	Support all staff groups to achieve compliance with IP&C mandatory training to ensure a competent and confident workforce	Kay Fawcett	Mercia Spare & Divisional ADNs	Monthly at IPCC		IP & C team deliver Trust and divisional mandatory training. Compliance increased to 85.9%

Appendix 1 - Healthcare Associated Infection Delivery Plan University Hospitals Birmingham NHS Foundation Trust: April 2013 to March 2014

	Finalise and implement the IP&C e-learning package to support a more convenient method of delivering Trust IP&C messages	Kay Fawcett	Joanne Ellison & Karen Jameson	Monthly at Learning & Development meetings		New training package forwarded to IT company for first draft of e-learning package
Corporate Objective	**Operational actions required**	**Executive Lead**	**Operational Lead**	**Review cycle**	**Red Amber Green**	**Progress**
5. To ensure that processes are in place to maximise timely learning from incidents and that where indicated, sustainable actions are implemented to prevent further incidence	The DIPC will lead a review of the current process for IP&C incident investigation and support implementation of change in line with Department of Health guidance on the Post Infection Review (PIR) process.	Kay Fawcett	Beryl Oppenheim	Monthly at IPCC		PIR process in place for MRSA bacteraemia and Trust apportioned CDI and working well.
6. To provide appropriate data and intelligence to clinical teams in a manner that will support local reductions in the incidence of HCAI at UHBFT through clinical improvement	The DIPC will lead the development of IP&C surveillance and information flow to the clinical teams	Kay Fawcett	Beryl Oppenheim	Monthly at IPCC		Development of systems for surveillance of a number of new alert organisms such as glycopeptide resistant enterococcal carriage/infection and new acquisitions of MRSA carriage being developed and will form part of reporting process.
7. To provide the Board of Directors with updates on delivery of the annual HCAI plan	Annual report for 2013-2014 will be developed for Board of Directors	Kay Fawcett	Beryl Oppenheim & IP&C Team	May 2014		Annual report to be presented to BOD in July.