AGENDA ITEM NO.

UNIVERSITY HOSPITAL BIRMINGHAM NHS FOUNDATION TRUST
BOARD OF DIRECTORS
THURSDAY 27 MARCH 2008

Title:	**REPORT ON INFECTION PREVENTION AND CONTROL FOR FEBRUARY 2008**
Responsible Director:	Kay Fawcett, Executive Chief Nurse
Contact:	Dr Adam Fraise, Director of Infection Prevention and Control. Ext 3524

Purpose:	To provide the Board of Directors with information relating to infection control issues (including MRSA bacteraemias and *C. difficile* episodes)up to and including **29 February 2008.**
Confidentiality Level & Reason:	None
Medium Term Plan Ref:	Strategic Aim 4 : Quality of services
Key Issues Summary:	This paper indicates the current position on MRSA bacteraemias and episodes of *C. difficile.* It also reports on the Trust's status related to the Saving Lives assessment, and on the progress of initiatives commenced to reinforce good practice and reduce the impact upon patient care.
Recommendations:	The Board of Directors is asked to accept this report on infection control action and progress.

Signed:		**Date:** 6 March 2008

UNIVERSITY HOSPITAL BIRMINGHAM NHS FOUNDATION TRUST
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REPORT ON INFECTION PREVENTION AND CONTROL UP TO 29 FEBRUARY 2008

PRESENTED BY THE CHIEF NURSE

1. Introduction

Last month's paper to the Board of Directors reported an update on performance against the national target for MRSA bacteraemia, the locally agreed target for *Clostridium difficile* (*C.difficile*) episodes and other impacts on operational performance related to infection. This paper continues this report including data from February 2008. The paper also includes reports of clusters and outbreaks and updates on the progress of recent initiatives.

2. MRSA Bacteraemias

2.1 MRSA Bacteraemias 2007/08 and Context

There have been 7 MRSA bacteraemias in February 2008 giving a total of 73 for the year up to 28 February 2008. This compares with a target of 49 for the year up to the end of March 2008. One of the 73 bacteraemias was also reported by Sandwell & West Birmingham NHS Trust. This case will not appear on UHB's trajectory figures for the year as the isolate from SWBH predated our isolate. Table 1 indicates the number of Bacteraemias within the Trust April 2007 – February 2008. These figures have been validated against the Trust's MESS returns to the HPA. Appendix 1 gives details of the bacteraemia cases for February 2008.

Table 1. Number of MRSA Bacteraemias by month up to 28 February 2008

Month	Total no. of bacteraemias	Bacteraemias acquired more than 48 hrs after admission? (likely to be UHB acquired)	
		Yes	No
April 2007	7	2	4
May	7	5	2
June	6	1	5
July	4	3	1
August	7	4	3
September	4	3	1
October	7	6	1
November	9	8	1
December	6	5	1
January	9	4	5
February	7	4	3
Total	**73 (72)**	**46**	**27**

2.2 Current Actions

The Trust has recently undertaken a benchmarking exercise against the national Saving Lives tool which is utilised by the DH to measure progress and actions related to Infection prevention and control. The current Trust score for this is 72%. Table 2 shows the recently completed national "Savings Lives" assessment. It is clear that the Trust needs to take action against each element and this is reflected in the Action Plan which was agreed by the Board in February 2008.

Table 2. Saving Lives Self assessment

Code of Practice for the Prevention and Control of Healthcare Associated Infections (HCAI) Self Assessment Tool Balanced Scorecard: Self Assessment Summary								
University Hospital NHS Foundation Trust, 13/12/07								
Overall Status								
72%								
Key								
	100%	Full compliance						
	71% - 99%	Action required						
	50% - 70%	Urgent action required						
	=< 49%	Trust priority						
Core Duty 2: Duty to have in place appropriate management systems for infection prevention and control (IPC)			**Core Duty 3: Duty to assess risks of acquiring HCAI and to take action to reduce or control such risks**			**Core Duty 4: Duty to provide and maintain a clean and appropriate environment for health care**		
13/12/07	**59%**		13/12/07	**67%**		13/12/07	**81%**	
Core Duty 5: Duty to provide information on HCAI to patients and the public			**Core Duty 6: Duty to provide information when a patient moves from the care of one health care body to another**			**Core Duty 7: Duty to ensure co-operation**		
13/12/07	**64%**		13/12/07	**67%**		13/12/07	**67%**	
Core Duty 8: Duty to provide adequate isolation facilities			**Core Duty 9: Duty to ensure adequate laboratory support**			**Core Duty 10: Duty to adhere to policies and protocols applicable to infection prevention and control**		
13/12/07	**67%**		13/12/07	**70%**		13/12/07	**67%**	
Core Duty 11: Duty to ensure that health care workers are free of and are protected from exposure to communicable infections during the course of their work, and that all staff are suitably educated in the prevention/control of HCAI								
13/12/07	**94%**							

Work is underway to address some of the most significant issues, and a programme of audit and surveillance is planned to assess the progress and benefits of initiatives in place. A further review of this benchmarking process will be undertaken at the end of March 2008.

2.3 Development of an Intravenous Devices Team (IV)

The IV Team was initiated at the end of November 2007 to address issues surrounding Peripheral Venous Cannula (PVC), Central Venous Access Devices (CVADs) and Dialysis lines. At the present time there are 5.5 WTE in the IV Team who are reviewing practice, completing audits and delivering education.

A line audit was undertaken throughout December and January. All 292 cannulae, and 80 central lines were assessed and the practice found to be variable, as a result an education plan was developed. It is anticipated that all areas will have received PVC education at least once by 14 March 2008. A re-audit of PVCs is scheduled to take place week commencing 31 March 2008.

All PVC education includes:

- Care of PVC's and dissemination of PVC guidelines
- No touch technique
- Documentation
- Phleblitis scoring

A more comprehensive audit of all CVAD's in the Trust is due to commence early March, training has already commenced and following the audit results a competency assurance exercise will commence for practitioners who care for CVAD's and dialysis lines.

2% Chlorhexidine is now being used for the insertion of all central lines in ITUs and theatres and insertion of dialysis lines in renal.

2.4 Root Cause analysis and follow up actions.

Root cause analysis meetings continue to take place for each MRSA bacteraemia. These meetings involve the CEO, COO, CN, MD and DIPC, and now also include the Divisional DD, DOO and ADN.

Issues from the last meeting are formulated into an action plan for education and action across all Divisions. An example of the process undertaken, and reviewed each time, is included at Appendix 2.

2.5 Deep Clean Programme - Update

The deep clean programme has continued with five further wards cleaned at QE during February and the use of Bioquel for renal as a part of the refurbishment programme. Four wards will be cleaned at SOH during March.

All of the additional furniture to support the programme has arrived with the exception of the beds which will arrive in three weeks.

Cleaning frequencies and responsibilities have been produced to support the proposed C.*difficle* cohort ward.

3. *Clostridium difficile* Episodes

3.1 Background to *C. difficile* Disease Monitoring

A new target needs to be agreed with the PCT for 2008 and it is expected that, given a target for the West Midlands of 41.5%, the PCT will set a local target for UHBFT of at least a 50% reduction by 2010/11 compared with a 2007/08 baseline. It is suggested, therefore, that an internal annual target of at least a 25% reduction would be consistent with the PCT target. This target is extremely challenging and will necessitate increased action in 4 key areas. These are: isolation of patients with diarrhoea, hand hygiene, antimicrobial stewardship and cleaning.

3.2 Current figures and Context

A total of 811 episodes of *C. difficile* disease were seen for 2007. 553 of these were in the 65 and over age group. There have been 138 episodes of *C. difficile* disease for January and February 2008. 100 of these were in the 65 and over age group. If this monthly rate continued this would project to an increase over 2007 numbers.

76 of these 138 (55%) were in Division 3 and this suggests that targeting SOH medicine is the most appropriate way of dealing with this issue.

3.3 Serious Untoward Incidents related to Infection Control

All MRSA Bacteraemias are reported as Serious Untoward Incidents (SUIs) to the PCT. Since the report from the Health Care Commission on the Maidstone and Tunbridge Wells outbreak of *C.difficile, those* cases detailed in part 1a or 1b of the death certificate and cases requiring surgery are now identified as SUIs and Root Cause analysis is completed for them. The figures related to deaths from both MRSA Bacteraemias and *C.difficile* are reported to the Clinical Quality Group, and a summary of them is reported below.

Month	Organism	Part 1a of death certificate	Part 1b of death certificate	Part 2 of death certificate	Total
Jan08	**MRSA**	**0**	**0**	**1**	**1**
	Cdiff	**3**	**1**	**4**	**8**
Feb08	**MRSA**	**0**	**0**	**0**	**0**
	Cdiff	**2**	**2**	**4**	**8**

These deaths should be set in the context of the Trust having an average of 180 deaths per month and in recognition of the frail elderly population who contract *C.difficile* with other co-morbidities.

In line with recent guidance, the Trust is also completing a prospective review of the documentation of *C. difficile* on death certificates to ensure that it follows Chief Medical Officer's requirements. This review will report to the Trust internal Clinical Quality Group.

5. Outbreaks of Diarrhoea and Vomiting

During February 2008, Ward ELB at QEH was affected with norovirus which required closure of the ward to new admissions. A total of 9 patients and 2 staff were affected. Following containment of the outbreak, the ward is now open.

6. Recommendations

The Board of Directors is asked to accept this report on infection prevention and control action and progress.

Mrs Kay Fawcett
Chief Nurse and Executive Lead
Infection Prevention and Control
6 March 2008

Dr Adam Fraise
Director of Infection Prevention and Control

Appendix 1. MRSA history, risk factors, possible source of bacteraemia and clinical outcome of patients at UHB with MRSA bacteraemia, for February 2008

Age (yrs) Sex	Admission date	Date of BC	Speciality & Location	MRSA Status at time of B/C	Likely UHB Acquired bacteraemia	Risk factors for a bacteraemia	Outcome
47	4/2/08	5/2/08	Oncology	NK	No	Supra-pubic catheter	Survived
54	26/1/08	5/2/2008	Oncology	NK	Yes	Surgery	Survived
49	12/2/08	15/2/08	Neurosurgery	Pos	Yes	PVC	Survived
66	17/2/08	17/2/08	General Medicine	Pos	No	Urinary catheter	Survived
64	11/1/08	18/2/08	Neurology	Pos	Yes	NK	Survived
86	21/2/08	21/02/08	General Medicine	Pos	No	None	Survived
51	28/1/08	25/02/08	Liver Medicine	Neg	Yes	CVC	Survived

Appendix 2. Action Plan for Root Cause Analyses – 11 February 2008

Name	Hosp No.	Date Rev'd	Specialty/ Location	Issues raised	Actions Identified and agreed	Lead	Date to be Completed	Status
TK		11.2.08	Div 2	1. identifying as needing Doxycydine – advice	KF to identify micro on call.	KF	Review in 1 month	
				2. Delayed results on PICS from 30 Jan to 5 February.	KF/DR to discuss with Microbiology	KF/DR	Review in 1 month	
				3. Failure to administer mupirocin/chlor even though on PICS	All spoken to re this	Teresa Deakin	Review in 1 month	
				4. PVC documentation	Spoken to all staff – audit to be completed	Teresa Deakin	Review in 1 month	
				5. Lack of swabs available in Trust	KF to investigate	KF	Review in 1 month	
				6. ICT training	All staff have dates			
MC		11.2.08	Div 3/MED/MAU	1. No culture completed at A&E	To be reviewed and ensure that A&E are clear on the process	LM	Review in 1 month	
				2. Not reviewed on post take by consultant	Divisional Director to establish why this did not occur.	TE	Review in 1 month	
				3. No care plan for PVC	LM to review and to reinforce the key issue of care plan compliance. Nurse in charge to check care plans daily.	LM	Review in 1 month	
				4. No Staph Packs available	Paul Hateley (PH) to investigate and	PH	Review in 1 month	

					ensure sufficiently packs are available.			
				5. Screening delayed	Need to ensure effective process for screening	AF & KF	Review in 1 month	
				6. Potential for PICs to ask "Are you going to screen yes/no"	Dave Rosser to explore	Dave Rosser (DR)	Review in 1 month	
				7. Check the process for high risk patients		KF/AF	Review in 1 month	
				8. Audit of progress	LM Nursing Team			
DT		11.2.08	Harborne/Div 4	1. Name of Doctor at prescribing		Mary Day	Feedback 1 month	
				2. Prompt removal of line or management if remains	Risks to be explained to patients	AP/JH BH re risks	Feedback 1 month	
				3. Delays in line removal	Issues with getting lines removed to be explored	JH/AP	Feedback 1 month	
				4. Line care competence	Standards to be maintained and line care to be assessed by nurse in charge on a daily basis	JH/AP	Feedback 1 month	
				6. Screening to identify key, high risk areas inc OPD where necessary		AF	Feedback 1 month	
RW		11.2.08	Medicine/Div 3	1. Admitted under wrong name through A&E	LM to check how this occurred and identify process for prevention in future	LM	Review 1 month	
				2. results not released till 6 Feb	AF to check the timeliness of results reporting	AF	Feedback 1 month	
				3. Check whether 2 blood cultures would be preferable	AF to advise	AF	Feedback 1 month	
				4. Packaging of culture bottles – is there a way to	AF to advise	AF	Feedback 1 month	

				maintain cleanliness i.e shrink wrapping?				
				5. PVC care plan delayed	Standards to be maintained and line care to be assessed by nurse in charge on a daily basis	Sonia Hopkins	Feedback 1 month	