The Whittington Hospital

NHS Trust

ITEM: 11/016 Doc: 13

Meeting:	Trust Board	
Date:	26 January 2011	

#### Title: Infection prevention and control report: 2010/11 Quarter 2 October-December.

# Executive Summary:

The attached report outlines the Trust's position in relation to Infection Prevention and Control Performance and activity for the 2<sup>nd</sup> Quarter October – December 2010.

Work has continued throughout the year to implement and embed the trust's infection prevention and control plan, including meeting all the external targets.

#### **MRSA Bacteraemia**

There has been 1 trust attributable MRSA bacteraemia episode so far in 2010/11 (diagnosed in May on a surgical patient in ITU). The agreed objective for 2010/11 is **4** trust attributable cases. The objective for 2011/2012 has not been disclosed, but it is likely to be **2**. There have been 2 cases of MRSA bacteraemia (August and November) which were PCT attributable to date this year. The Trust has participated in the PCT led Root Cause Analysis into both cases. (Appendix 1)

#### **MRSA Screening**

MRSA screening audits demonstrate **92.2 %** compliance for our emergency patients and **86.4%** compliance with elective patients (November 2010). This is an improvement from the previous quarter when compliance was 89% for emergency patients and 82% for elective patients.

### **C-Difficile**

*C.difficile* cases up to end of December 2012 were below trajectory with 30 cases against target to date of approximately 60. The *C. difficile* target for 2010/11 is 79. The objective for 2011/12 is 34. (Appendix 1)

There has been one case where *C.difficile* has been recorded as the cause of death on the patient's death certificate's 29/11/10. An investigation by the Trust has been completed and NHS London has been informed.

All other ward based infection indicator audit results are presented in the attached dashboard (Appendix 2).

### Surgical Site Surveillance (SSI)

The Trust's SSI rates are currently above the national average for patients who have undergone specific orthopaedic surgery (Hip replacement, Knee replacement, Hemi – arthroplasty). This can be explained by the fact that the Trust performs a low rate of this type of operation therefore a small increase in infection episodes will result in a higher percentage rate than the national average. In summary the Trust reports show that in the last year we preformed 139 Knee replacements with 1 infection (0.72% SSI rate), 122 Hip replacements with 3 infections (2.5% SSI rate) and 149 Repair of Neck Of Femur (NOF) with 8 infections (5.4% SSI rate).



SSI in repair of NOF cases are traditionally higher than in the other patient groups. This is because the majority of patients, who require emergency surgery, are elderly and belong to a known high risk category.
Specifically since October 2010 there has been a cluster of SSI in a group of patients who had undergone surgery to repair fractured NOF. This was identified as a pseudomonas infection most likely associated with water contamination. This type of infection is a national issue. The Trust is fortunate in that one of its microbiologists is a lead at the Department of Health dealing with this issue.
A working group has been established within the Trust led by the Director of Facilities to further investigate the underlying causes associated with this cluster. A number of actions have been implemented to date, including the testing of water samples, the installation of filtered shower heads, and the appointment of a surveillance nurse who will monitor the incidence and identify occurrence of infections at an earlier stage. There is also a retrospective study ongoing in relation to these cases to identify possible sources of infection. This working group reports to Infection Control Committee, which meets on alternate months and through it to the Clinical Governance Committee.

Action:	For information	

Sponsor:	Bronagh Scott
	Director of Nursing and Clinical Development & DIPC

Financial Validation	Name of finance officer
Lead: Director of Finance	
Compliance with Care Quality Commission	Reference:
Regulations / Outcomes	Regulation 12 / Outcome 8: Cleanliness and

	infection control
Lead: Director of Nursing & Clinical Development	

# Infection prevention and control update: October to December 2011

# 1. Performance against Trust targets

### 1.1 MRSA Bacteraemia

There has been 1 trust attributable MRSA bacteraemia episode so far in 2010/11 (diagnosed in May on a surgical patient in ITU). The agreed objective for 2010/11 is **4** trust attributable cases. The objective for 2011/2012 has not been disclosed, but it is likely to be **2**.

# 1.2 MRSA Screening

MRSA screening audits demonstrate **92.2** % compliance for our emergency patients and **86.4**% compliance with elective patients (November 2010).

Non-compliance for emergency patients occurs mainly in the Emergency Department at weekends, or when patients are admitted by another route other than ED, such as directly from clinic, or from another hospital. There are also some problems with the correct labelling and paper work of some samples that can therefore not be processed. The Infection Prevention and Control team is working closely with ED staff to resolve this issue. Performance is monitored by the Infection Control Committee at its meeting every 2 months.

# 1.3 Clostridium Difficile (C.diff)

*C.difficile* cases up to 31<sup>st</sup> December 2011 were below trajectory with 30 cases against target to date of approximately 60. The *C. difficile* target for 2010/11 is 79. The objective for 2011/12 is 34. There has been one *C.difficile* death recorded as the cause of death on a patient's death certificate on 29/11/10. An investigation by the Trust has been completed and NHS London has been informed via STEIS reporting.

Whilst meting the target currently there is no room for complacency during our current winter months where cases normally rise. Staff have been reminded of the need to maintain vigilance around hand hygiene, environment cleaning (especially commodes) and good isolation practice, as well as medical staff prescribing antibiotics appropriately.

# 1.4 Surgical Site Surveillance (SSI)

The Trust's SSI rates are currently above the national average for patients who have undergone specific orthopaedic surgery (Hip replacement, Knee replacement, Hemi – arthroplasty). This can be explained by the fact that the Trust performs a low rate of this type of operation therefore a small increase in infection episodes will result in a higher percentage rate than the national average. In summary the Trust reports show that in the last year we preformed 139 Knee replacements with 1 infection (0.72% SSI rate), 122 Hip replacements with 3 infections (2.5% SSI rate) and 149 Repair of Neck Of Femur (NOF) with 8 infections (5.4% SSI rate).

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associated with water contamination. This type of infection is a national issue. The Trust is fortunate in that one of its microbiologists is a lead at the Department of Health dealing with this issue.

A working group has been established within the Trust led by the Director of Facilities to further investigate the underlying causes associated with this cluster. A number of actions have been implemented to date, including the testing of water samples, the installation of filtered shower heads, and the appointment of a surveillance nurse who will monitor the incidence and identify occurrence of infections at an earlier stage. There is also a retrospective study ongoing in relation to these cases to identify possible sources of infection.

This working group reports to Infection Control Committee, which meets on alternate months and through it to the Clinical Governance Committee.

# 1.5 Root Cause Analysis (RCA)

Each case of MRSA Bacteraemia and outbreak of c.diff is reported externally to NHS London n via STEIS and fully investigated through an infection control specific RCA. Actions arising from the findings are converted to an RCA action plan which is monitored bi-monthly at the Infection Control Committee, until all actions have been completed.

Deaths which occur as a result of *C.difficile* and are recorded on part one A of a patient's death certificate also has a full RCA preformed and are also reported to NHS London via STEIS. The actions emerging from the RCA are monitored by the infection Control Committee.

### 1.6 Monitoring

NHS London

As well as the trust wide action plan and ward-based dashboards which are discussed below, a weekly "flash report" is produced, that sets out progress against the key targets (Appendix 1)). This is shared with the executive committee and relevant senior managers/clinical staff throughout the trust weekly.

### 2. Progress against trust-wide infection prevention and control plan

A Trust wide Infection Control Plan is monitored by the infection Control Committee at its Bi-monthly meeting. To date the plan is showing that of the eleven Saving Lives actions, 12 are green, four amber and one is red rated, the remaining red being prevention of surgical site infection. All four governance actions are green rated.

With regards to surgical site infection surveillance, good progress has been achieved in orthopaedics joint replacements, colorectal and vascular specialties. An initial caesarean section surveillance exercise was carried out, but will not be resumed until an electronic system is in place to capture the data. (It is not currently included in CQUINs). CQUIN surveillance has commenced as of January 1<sup>st</sup> 2011. A business case has been successful and an additional nursing post has been created for this work.

A specific action plan related to a cluster of pseudomonas infections in patients with Hip operations in Coyle ward is currently being implemented and reported to the Infection Control Committee. The cluster of cases occurred in November 2010 and there have been no additional cases since.

# 3. Ward infection prevention and control indicator dashboard

Individual ward scores against the relevant infection prevention and control indicators are now set out in an easy to read dashboard. The dashboard is shared with the ward staff and matrons as soon as it is available, so that corrective actions can be taken as soon as possible where indicated. The dashboard also shows the previous quarter's scores so that progress can be monitored over time. The latest dashboard (Appendix2) shows that 72% of wards were green and fully compliant. The 11.3 of reds are of concern, the main area being hand hygiene. The relevant ward managers and matrons are addressing this and regular audits are being carried out until the performance has improved. The Infection Control link worker's role has extended to training at least 5 staff members every month in correct hand hygiene techniques. The number of staff members trained will be collated and monitored by the Infection Control Team.

A hand hygiene promotion poster competition has been run to help promote hand hygiene and also provide for the Trust new hand hygiene posters. The winners have been chosen and posters will be displayed in the foyer in January 2011. All winning posters will be printed and used in clinical areas.

In relation to hand hygiene, where audits demonstrate compliance to be below the 95% target in any area the audits are repeated until there are 3 consecutive audits demonstrating compliance above 95%.

In relation to peripheral lines a number of actions have been implemented to improve compliance. This has included training of link staff on each ward to oversee and monitor practice and performance.

Problems have been identified with cleaning commodes given the design of the commode and the difficulty to prevent a build up of rust. A new commode has been sourced and will replace all existing commodes as they are required.

The Trust is also participating in a London wide initiative known as the Safety Thermometer where monthly prevalence rates of a number of safety indicators are conducted including care of peripheral lines and care of catheters. This initiative commenced in December 2010 and will provide benchmarking data across a number of Trusts and will also encourage the sharing of good practice.

# 4. Training

A critical success factor in preventing and controlling infection is to ensure that our staff have up to date skills and knowledge to enable them to practice safely. An ongoing trust-wide training programme, supported by competency assessment, is therefore essential. This is built into the action plan and focuses on the management of urinary catheters, peripheral cannulae and taking of blood cultures. During the last year training has been provided to junior doctors by the Director of Infection Prevention and Control/infection control team, and to nurses/midwives by the Trust's training team. Training needs analysis is being undertaken to show how much more training needs to be provided and the number/type of trainers needed to provide it.

Infection Control Nurses also provide training on all clinical and non-clinical mandatory study days and two training sessions on Trust Induction organised by the training and development department. 6 study days per year are provided for the Infection Control link staff.

Infection Control Nurses also participate on IV study days and take part in ad-hoc training such as the student nurse / pharmacy trainees' induction.