

Board of Directors (Public) Item 3.6

board report

Subject: Infection Prevention and Control Quarterly Report
Date of meeting: 20th October 2015
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Presented by: Dr Raph Perry (Director of Infection Prevention and Control)

Data Quality Rating	BAF Ref	Impact on BAF Risk Rating?
Silver	2,3	Nil

1. Executive Summary

This paper provides information and an update on infection prevention and control issues for the time period 1st July - 30th September 2015. Previous papers have covered the period up to the end of June 2015.

2. Background

High standards of infection prevention and control are essential to ensure that people who use health care services receive safe and effective care. The *Health and Social care Act 2008: Code of Practice on the prevention and control of infections* identifies that good organisational processes and a robust assurance framework are essential to ensure effective infection prevention.

In order to demonstrate that infection prevention is integrated into the assurance framework one recommendation is that the Board of Directors receives regular updates from the infection prevention and control team, including information on alert organisms, outbreaks, cleanliness standards and audit information. This report provides such an update.

3. Issues

3.1 Surveillance and Alert organisms

3.1.2 Mandatory reporting

There is a requirement that bacteraemias (positive blood cultures) caused by certain bacteria and also *Clostridium difficile* infections are monitored and reported to Public Health England on a monthly basis. These cases are also reported to the Clinical Commissioning Group monthly.

	Number of cases July – Sept 15	Target for 2015/16	Comments
MRSA bacteraemias	0	0	
Staphylococcus	2	Mandatory	These patients had been

aureus (MSSA) bacteraemias		reporting but no targets assigned	readmitted to the Trust with post-op infections following cardiac surgery
E. coli bacteraemias	3	Mandatory reporting but no targets assigned	1 patient had duodenal abscess 1 patient had empyema and infection of thoracotomy wound 1 patient had chest infection
Clostridium difficile infection	3	≤ 4	Patient reviews performed, submitted to CCG.

C. difficile

Patient 1- July

Patient nursed on Critical Care. Review indicated that the policy was not followed. Documentation was not completed appropriately, a sample was not sent at the correct time and the patient was transferred into an open bay on a ward whilst apparently symptomatic (but before the test result was returned). This has been fed back to the relevant senior staff although the patient had been cared for by agency staff. A change request has been made to alter the transfer sheet in EPR to include this information

Patient 2- September

Patient nursed on Critical care. Multiple patient risk factors identified. Antibiotics were appropriate, the policy followed and no lapses in care identified.

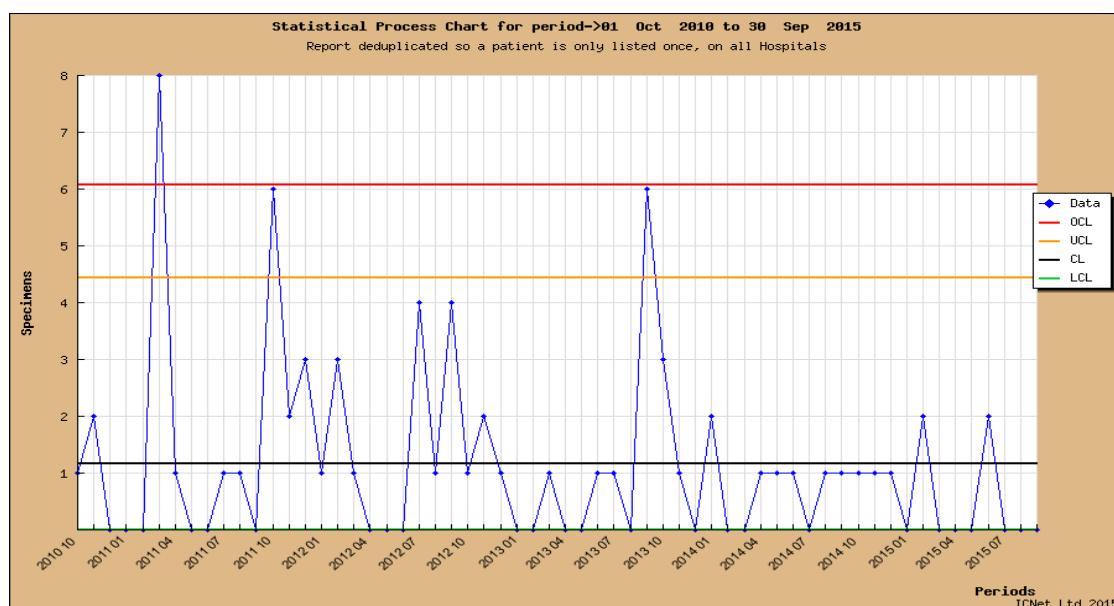
Patient 3 – September

Patient nursed on Cedar Ward. The patient's movements were tracked to identify any overlap with patient 2. Both patients had been on Critical Care at some point in their journey although they had not been in at the same time and had not been admitted to the same bedspaces. There appeared to be no crossover of staff or equipment between the 2 patients. Therefore it is hard to establish if there is a link between the 2.

3.1.3 MRSA – all cases

Cases of MRSA in the Trust are closely monitored to identify any increased incidence or outbreaks. The graph below shows all cases of patients with MRSA in the Trust, which have been designated as Trust acquired, including both colonised and infected patients.

Although there have been patients in the Trust with MRSA during this time period these were identified before or on admission and 0 cases were identified as Trust acquired.



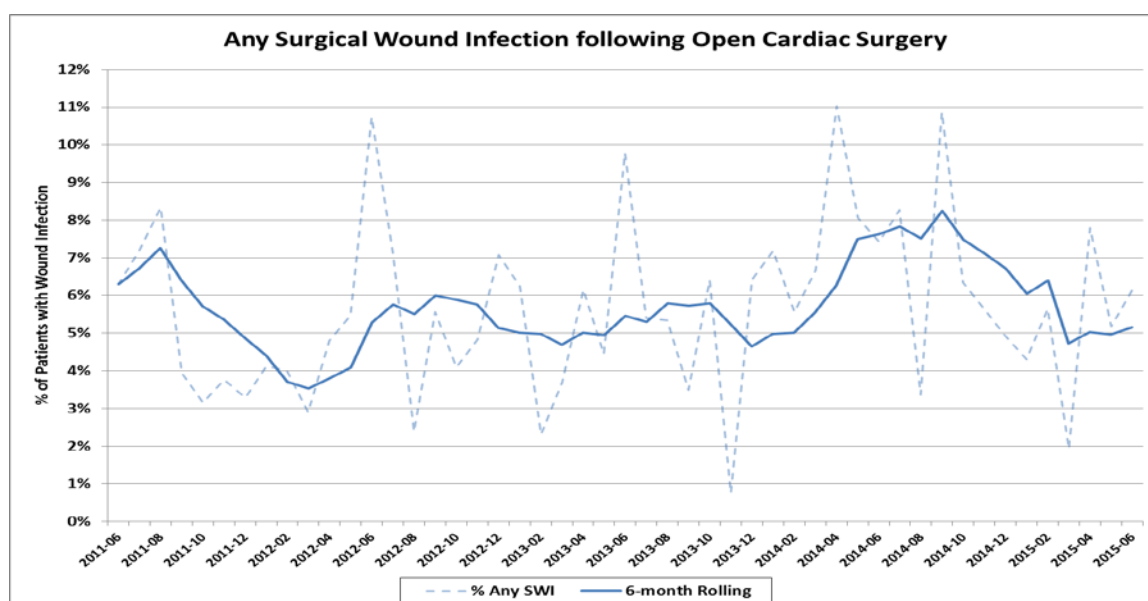
3.1.4 Carbapenemase Producing Enterobacteriaceae (CPE)

1 patient has been identified with a positive isolate whilst in this Trust. The patient was on Critical Care at the time. There was no overlap with any other known positive patients. 67 patients were identified retrospectively as possible “contact patients” i.e. they had been nursed in the same bay or in the Intensive Care Unit at the same time as this patient at some point during her stay. 27 of these patients were screened for CPE, the remainder had already been discharged. All the screens taken were negative. Weekly screening on the ITU has not identified any further cases.

3.1.5 Surgical Site Infection – Cardiac Surgery

All patients who have had CABG or valve surgery are entered onto a surveillance database and complications related to infection at the surgical site are identified by the infection prevention team and tissue viability nurses. The results are given below.

No specific trends can be identified although analysis of the infections by site has identified that although the rates overall have not changed significantly there is an apparent decrease in the number of deep harvest site leg infections. Further work is required to provide a more in depth analysis of the riskfactors associated with infection.



3.2. Hand hygiene

Clinical areas carry out weekly observational audits of hand hygiene in their area, with 1 audit in a peer review ward each month. Some areas have not submitted all the audits but this has been raised with the relevant managers and the results have been forwarded to the Heads of Nursing so they can monitor that the audits are performed according to the schedule.

	July	August
Results of Compliance Audits	100%	100%
No. of Observations	649	590

3.3. Cleanliness

A standard monitoring tool is used by the Hygiene supervisors to assess environmental cleanliness. The target is an overall Trust score of 95%, with an individual score for clinical areas of 95% or above.

The overall monitoring scores for the Trust were:

	July	August
Results	98.2%	97.8%

3.4. Audits

Audits have been performed monitoring standards related to:

Isolation facilities and practices

The result showed widespread compliance with policies apart issues related to waste disposal. This has been feedback to the relevant managers

MRSA screening

Compliance with screening pre-admission or on admission was found to be 90%.

Compliance with the change in policy to exclude screening for certain categories of day cases was found to be 93%.

The infection prevention team has estimated that this will equate to an annual saving of £24,000.

Posters on the screening regimes have been circulated to all areas.

Resistant organism screening on Critical care

Compliance with the weekly screening for resistant organisms of relevant patients on CCA was 95%.

Antibiotic prescribing-point prevalence

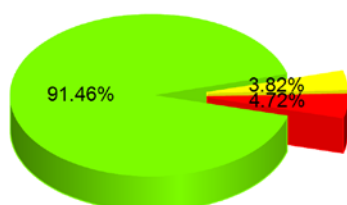
Compliance has improved in some areas. Documentation related to duration of therapy has not improved. This has been feedback to Drugs and Therapeutic Committee and an action plan developed.

Cleanliness of equipment/patient environment

This has been assessed using the Clean Trace system. Results are given below:

Measurements: 445. Pass: 407. Caution: 17. Fail: 21

Pass Caution Fail



If any failures are identified the equipment is cleaned immediately and an email is sent to the manager for that area to inform them of the results. Monthly reports are sent to the managers and Heads of Nursing so that they can monitor progress and identify any trends.

3.5 Mycobacterial endocarditis

Further water samples have been taken from the heater coolers in theatre following the introduction of the new decontamination regime and filtration of the water in the perfusion department. However the repeat water samples still show the presence of Mycobacteria species. Therefore this issue has not been satisfactorily resolved.

The perfusion department have now purchased 2 new machines and are exploring the options and implications of full decontamination of the internal mechanisms of the machinery and/or replacement of the internal tubing.

3.6 Evaluation of technology to decontaminate the patient environment

Environmental contamination plays an important role in the transmission of hospital acquired pathogens. Many studies have shown that manual cleaning alone cannot always deliver effective reduction in microbial counts for all surfaces.

In October the infection prevention team will be conducting an evaluation of the levels of microbial burden in the theatre and ward environments and the use of Ultraviolet – C to decontaminate these areas. There will be no cost to the Trust for this evaluation. Results will be discussed at the Infection Prevention Committee.

4 Conclusion

The surveillance of infections and routine audit data continue to be monitored and indicate no outbreaks.

Work is on-going to ensure the annual programme is fulfilled and a robust audit programme is in place.

5 Recommendations

The Board is asked to note the contents of this report.