

## Board of Directors (Public)

### Item 2.4

**Subject:** Director of Infection Prevention and Control Quarter 3 Report  
**Date of meeting:** 31<sup>st</sup> January 2017  
**Prepared by:** Nicola Best (Infection Prevention Nurse Specialist)  
**Presented by:** Dr Raph Perry (Director of Infection Prevention and Control)

BAF Ref	Impact on BAF
1.2,1.3	None

### 1. Executive Summary

This paper provides information and an update on infection prevention and control issues for the time period 1<sup>st</sup> October – 31<sup>st</sup> December 2016.

### 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 of Bacteraemias and C Difficile infections

#### 3.2 Audits

#### 3.3 Cleanliness

There is a requirement that bacteraemias (blood stream infections) 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 Oct – Dec 16 (Year to Date) Attributable to Trust	Target for 2016/17	Comments
MRSA bacteraemias (Bloodstream)	0 (0)	0	

Staphylococcus aureus (MSSA) bacteraemias-	5 <b>(8)</b>	Mandatory reporting but no targets assigned	See section <b>3.1.2.1</b> below
E. coli bacteraemias-	2 <b>(5)</b>	Mandatory reporting but no targets assigned	Reviews indicated that the probable cause was a urinary tract infections and in the other case the cause was not definitively identified
Clostridium difficile infection (C. difficile <b>toxin</b> positive)	3 <b>(3)</b>	≤ 4	See section <b>3.1.2.2</b>
Clostridium difficile infection (C. difficile <b>gene</b> positive only)	2 <b>(2)</b>	No targets assigned	

### 3.1.2.1 MSSA Bacteraemias

The numbers of MSSA bacteraemias have increased during this year. Reviews of patients over this year and last year have highlighted that in the majority of cases these are post-operative surgical patients, some of whom have developed surgical site infections. The infection prevention team have reviewed recent guidelines related to the prevention of Surgical Site Infection prevention and carried out an assessment of current practices and assurances against these recommendations. This review has been submitted to the Infection Prevention Committee with a recommendation that a working group is convened to oversee any additional work required.

### 3.1.2.2 Clostridium difficile

All patients were surgical patients and were cared for on Critical Care, Oak ward and Cedar ward. However there was no direct overlap of patients in time and space and no cross infection was identified, as differing C difficile ribotypes were present in the patients.

Patient reviews have been commenced by the infection prevention nurses. However feedback or “sign off” from the relevant divisions has not been completed in some cases.

Areas for improvement and learning points have been identified and shared with relevant areas these included; ensuring samples are taken at the correct time, ensuring patients are isolated upon suspicion of infection (if possible) rather diagnosis, consistency and accuracy of documentation, ensuring stop/review dates for antibiotic therapy prescriptions.

### 3.1.3 MRSA – all cases (Non- bloodstream)

All cases of MRSA in the Trust, including infected and colonised patients, are closely monitored to identify any increased incidence or outbreaks.

Although there have been a significant number of patients in the Trust with MRSA during this time period these were identified before or on admission and only 3 cases were identified as Trust acquired (colonised patients only).

### 3.1.4 Carbapenemase Producing Enterobacteriaceae (CPE)

1 patient, not previously known to be CPE positive was identified as being colonised with CPE in December (3 year to date). This patient was not screened on admission but a routine screen performed a number of days after admission showed CPE in a rectal swab. A number of contact patients were traced and screened but no other cases identified.

### 3.1.5 Vancomycin Resistant Enterococcus (VRE)

25 patients were identified as having VRE positive isolates in this time period.

18 were designated as Trust acquired (i.e. not known positive on admission or sample taken after 2 days of admission).

The majority of the new isolates were from patients on Critical Care and the majority represented colonisation only. However Critical Care is the only area that routinely tests for colonisation with VRE as part of a weekly screening regime. Therefore it is not always possible to identify where and when the patients acquired VRE.

## 3.2. Audits

### 3.2.1 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, including the peer 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. Some issues have been identified related to education and training

	October	November	December
<b>Results of Compliance Audits</b>	99%	98%	91%
<b>No. of Observations</b>	607	607	576

## 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:

	October	November	December
<b>Results</b>	97%	98%	99%

When a problem is identified i.e. the expected standard of cleanliness has not been reached this is rectified immediately.

Scores for individual areas indicate that the required standard (95%) was reached in all clinical areas. However this is not always the case in the public corridors. High volumes of cleaning requests for patient bedspaces/patient rooms between 4pm-11pm continue and this has had an impact on the work of evening staff cleaning public areas. A deep clean of the corridors is scheduled for January 2017.

## 3.4 Sepsis Update

Sepsis carries a significant mortality and the trust has had systems in place for appropriate management of septic patients utilising the sepsis bundle. The achievement of KPIs around timing of blood cultures and the administration of timely antibiotics has been variable. This has been the focus of considerable amount of work by the sepsis lead and the infection prevention committee with a reinvigorated sepsis management program allied to new national guidance.

<b>2015/16 Total</b>	<b>2016/17 Sepsis Bundle</b>	<b>Week commencing (n=3)</b>	<b>2016/17 YTD</b>	<b>Target</b>
58%	Delivery of at least one sepsis antibiotic within 1 hour of prescription	100%	57%	95%
92%	Delivery of at least one sepsis antibiotic within 3 hour(s) of prescription	100%	95%	95%
70%	Blood cultures taken within one hour preceding antibiotic	33%	67%	95%

In November the new national screening tool for sepsis was launched. This has been incorporated into EPR and focusses on the appropriate diagnosis of severe sepsis. The screening tool has been presented at audit days and training delivered by the sepsis lead and IP nurses. From December the trusts intranet page will have a splash screen outlining the new processes and updating the changes to EPR. Only patients satisfying the screening criteria will start the sepsis bundle.

There has been a lot of work with the EPR team and the analysts to explore the barriers to describing the data appropriately. Non EPR audits consistently show a better performance in the KPIs than the data routinely produced through the EPR query. Some simple refinements to the timing of data entry will facilitate an improvement in blood culture KPI. The focus on severe sepsis should lead to an improvement in the timing of antibiotic administration.

#### **4.0 Conclusion**

The surveillance of infections and routine audit data continue to be monitored and work is on-going to ensure the annual programme is fulfilled and a robust audit programme is in place.

#### **5.0 Recommendations**

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