

## Board of Directors (in Public)

### Item 2.5

**Subject:** Director of Infection Prevention and Control (DIPC)  
Quarter 3 Report

**Date of Meeting:** 8<sup>th</sup> January 2018

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**Presented by:** Dr Raphael Perry: Medical Director

**Reason for Report:** To Note

BAF Ref	Impact on BAF
1.1,1.2	The paper provides assurance that surveillance systems and audit processes are in place to monitor and prevent health care associated infections.

### 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 – 30<sup>th</sup> November 2018. Previous reports have covered the period up to September 2018.

This paper provides assurances that surveillance systems and audit programmes are in place to monitor and prevent healthcare associated infections. The levels of Trust attributable infections remain relatively low. A number of audits have been performed across the Trust which identified some issues which have been feedback to the relevant managers to address.

### 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

##### 3.1.1 Mandatory reporting of Bacteraemias and C Difficile infections

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.

		<b>October 18 – November 18 (Year to Date)</b>	<b>Target</b>
1.	Trust attributable MRSA (Methicillin Resistant Staphylococcus aureus) bacteraemias	0 <b>(0)</b>	0
2.	Trust attributable MSSA (Methicillin Sensitive Staphylococcus aureus) bacteraemias	1 <b>(2)</b>	
3.	Trust attributable E coli bacteraemias	2 <b>(5)</b>	Regional target - 10% reduction from previous year i.e. 8 cases
4.	Trust attributable Klebsiella species bacteraemias	1 <b>(1)</b>	
5.	Trust attributable Pseudomonas aeruginosa bacteraemias	0 <b>(1)</b>	
6.	Trust attributable Clostridium Difficile infection	1 <b>(2)</b>	≤ 3

#### Patient Reviews for Bacteraemias

Patient reviews have been performed for all reportable bacteraemias to try to identify the initial source of infection and assess if there are any learning points or areas for improvement. Of the 4 reportable Trust Attributable bacteraemias within this time period; 1 was probably caused by a urinary tract infection, 2 were caused by chest infections and for 1 patient the causes were not identified.

The patient reviews have been submitted to the relevant divisions for discussion.

#### Clostridium difficile

Patient review did not identify any significant lapses in care although it was noted there were some inconsistencies and omissions in the documentation. This has been discussed and feedback to the relevant ward.

### **3.1.2 MRSA – all cases (Non- bloodstream)**

Cases of MRSA in the Trust are closely monitored to identify any increased incidence or outbreaks. This includes all patients and all isolates, including colonised and infected patients.

24 patients were MRSA positive in this time period but the majority of these were already known to be positive or MRSA was isolated from the admission screen. 1 patient acquired MRSA whilst in the Trust.

### **3.1.3 Carbapenemase Producing Enterobacteriaceae (CPE)**

2 new cases were identified but none of these were designated as Trust attributable.

### **3.1.4 Vancomycin Resistant enterococcus (VRE)**

21 patients were identified with VRE

11 of the patients were designated as not Trust acquired i.e. screened positive on admission.

5 patients had not had a screen for VRE prior to the positive sample therefore unknown whether this was Trust acquired

However 5 patients had had a negative screen (s) prior to the positive one therefore probably acquired VRE whilst an inpatient at this Trust.

The majority of the new isolates were from patients on the Critical Care Unit. However this 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.

## **3.4 Audits**

### **3.4.1 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 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.

	<b>October</b>	<b>November</b>
<b>Results of Compliance Audits</b>	100%	93%
<b>No. of Observations</b>	677	555

## **3.5 Cleanliness**

### **3.5.1 Environmental 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.

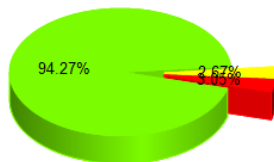
All clinical areas scored above the target score within this time period.

	October	November
Results of Compliance Audits	96%	98%

### 3.5.2 Monitoring of Equipment cleanliness

The Clean Trace system helps to assess standards of hygiene and cleaning processes by using a swabbing system to monitor levels of contamination at the point of use. All wards are expected to complete an audit monthly to monitor cleanliness of equipment and patient items.

Pass Caution Fail



Measurements: 262. Pass 247. Caution:7 Fail: 8

All equipment that failed was cleaned at the time and results fed back to individual ward managers and Matrons.

## 4. Sepsis

The lead for sepsis Dr Al-Rawi leads a working group on sepsis to improve further the care of patients with sepsis at LHCH. The group comprises Dr Al-Rawi, Dr Toong, (consultant microbiologist), the DIPC, the sepsis audit analyst and the outreach nurses. The DIPC and sepsis lead meet regularly with the analysts outside of the group meetings.

There is increased involvement of the outreach nurses in delivering the sepsis bundle and leading on education with the ward staff.

There have been a number of further changes to the EPR workflow. These include revisiting the search string for the routine weekly data; rationalising the collection of blood culture timing; pop up reminders for the screening tool when trying to prescribe sepsis antibiotics off bundle; a tick box for MEWS greater than 5 to eliminate the need for the screening tool; automatically opening the sepsis bundle on completion of high risk screening.

The use of NEWS2 is under discussion with NHSE. The NEWS2 approach does not use urine output as a key measure and it is considered this may adversely affect the evaluation of cardiothoracic patients. Early local audit data supports this view. It has been agreed that the trust will use both the MEWS and NEWS2 and continue to audit and compare outcomes.

The number of sepsis patients being treated ad hoc off bundle is reducing. Regular monthly audit of non compliance with the sepsis bundle is now available and the Medical Director will take this forward with individuals.

## **5. Water Safety**

A Multi Trust Water Safety Group has been convened, comprising of representatives from LHCH, RLBUHT, AUH and LWH. The aim is to share knowledge and expertise and to produce a standardised water safety plan, with each individual Trust being responsible for on-going monitoring and maintenance of their water system.

A Water Safety audit has been completed by an external contractor and an action plan developed to address any deficits identified.

## **6. Antimicrobial Stewardship**

An audit programme is in place, led by the antimicrobial pharmacists, to demonstrate evidence of good antimicrobial stewardship by collecting data on prescribing documentation, compliance, duration of therapy and antibiotic review. There are regular antibiotic ward rounds, every other month, with the pharmacists and the consultant microbiologist.

The antibiotic plan has been updated and in order to provide a greater level of assurance and oversight to the Trust a multi- disciplinary antibiotic stewardship group will be reinstated.

## **7. Summary**

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.

## **8. Recommendations**

The Board is asked to note the contents of this report and request further updates on progress against the annual plan and outstanding action plans.