

## Board of Directors (in Public) Item 2.2

**Subject:** Director of Infection Prevention and Control (DIPC)  
Quarterly Report  
**Date of Meeting:** Tuesday 24<sup>th</sup> November 2020  
**Prepared by:** Nicola Best, Infection Prevention Nurse Specialist  
**Presented by:** Dr Raphael Perry, Medical Director  
**Reason for Report:** To Note

BAF Ref	Impact on BAF
WC1,AQ1	To provide assurance on the systems and processes in place to ensure high standards of infection prevention and control

### 1. Executive Summary

This paper provides information and an update on infection prevention and control issues for the 2<sup>nd</sup> quarter of this financial year 1<sup>st</sup> July until 30<sup>th</sup> September 2020. Previous reports have covered the period up to 30<sup>th</sup> June 2020.

This paper provides assurances that surveillance systems and audit programmes are in place to monitor and prevent healthcare associated infections. A number of audits have been performed across the Trust which identified some issues which have been fed back to the relevant managers to address. The COVID -19 pandemic has resulted in a number of challenges and a strategy has been compiled to address these.

### 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

##### 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.

##### Mandatory Reporting – Bacteraemias (Blood cultures)

		Attributable cases Jul– Sept 20 (Year to Date- Trust attributable)		Target for 20/21
	MRSA bacteraemias	0 (0)		0
	MSSA bacteraemias	2 (3)		7
Gram Negative Bacteraemias	E coli	1 (1)		
	Klebsiella sp.	0 (0)		
	Pseudomonas aeruginosa	0 (0)		

Reviews have been undertaken for the patients with bacteraemias.

##### MSSA bacteraemias

One patient on Critical Care had a chest infection

One patient on Birch ward had an infected peripheral cannula and this was the probable source of the bacteraemia. This case and the learning points and actions was discussed with the medicine division.

##### E coli Bacteraemia

A patient review was undertaken and the probable source identified as an underlying infection/abscess unrelated to surgery.

#### 3.2 C. difficile Infection

	Attributable cases July - Sept 20 (Year to Date)		Target for 20/21
Clostridium difficile infection (C. difficile <b>toxin</b> positive)	1 (2)		4

A patient review has been completed and been sent to the relevant ward (Cedar). A number of issues were identified and these have been discussed and actions agreed at surgical governance

### 3.3 Trust attributable MRSA (all cases)

Although there were a number of patients with MRSA, these were known to be positive before admission or tested positive on admission. There were only 2 patients who tested positive for MRSA that may have been Trust acquired, these patients were not linked. All actions including isolation and decolonisation were instituted at the time.

### 3.4 Trust attributable Carbapenemase producing Enterobacteriaceae (CPE)

There were 3 patients who tested positive for CPE after admission, none of these cases were linked. All actions including screening and isolation were instituted following the positive results.

### 3.5 SARSCoV2 (COVID-19)

A number of patients tested positive for SARS coV2 in this time period, cases have been attributed according to the national definitions, as below. The majority of patients were known to be positive on admission because they were transferred in from neighbouring Trusts or they tested positive on admission but there has been some healthcare associated infections linked to both staff and patients.

COVID 19 Patients April-Sept 20 -Attribution	Numbers of Patients
<b>Community-Onset</b> – First positive specimen date <=2 days after admission to trust.	47
<b>Hospital-Onset Indeterminate Healthcare-Associated</b> – First positive specimen date 3-7 days after admission to trust.	17
<b>Hospital-Onset Probable Healthcare-Associated</b> - First positive specimen date 8-14 days after admission to trust.	17
<b>Hospital-Onset Definite Healthcare-Associated</b> – First positive specimen date 15 or more days after admission to trust.	4

A number of outbreaks have occurred over this time period affecting Birch, and Cedar/POCCU. This involved both staff and patients.

Outbreak meetings were called at the time and a number of actions instituted including

- Cohorting of patients
- Contact tracing
- Additional screening of patients
- Deep cleaning bays/siderooms/bathrooms/equipment
- UV-C decontamination

- Screening of asymptomatic staff
- Audits undertaken – as listed below
- Schedules changed – e.g. increased cleaning of bathrooms
- Number of beds reduced to ensure social distancing can be maintained
- Increased monitoring and oversight by Silver Command via daily reporting

The outbreaks have been reported externally according to the outbreak reporting system for the North West region.

### 3.6 Environmental Cleanliness

Due to the Covid- 19 pandemic the cleaning schedules have changed in line with the implementation of the Trust enhanced cleaning strategy

Cleaning regimes have been agreed with the Infection Prevention team, Silver and Gold command and include additional cleaning of communal and public areas and deep cleaning within areas with suspected and confirmed cases of Covid-19.

The standard monitoring tool used by the Hygiene supervisors to assess environmental cleanliness has continued to be used The target is an overall Trust score of 95%, with an individual score for clinical areas of 95% or above. Hygiene services have been under renewed pressure because of the increased frequency of cleaning and the number of areas requiring deep cleaning however the cleaning scores in patient and clinical areas have met the required standards as shown below.

	July	May	June
<b>Results overall of Compliance Audits</b>	97%	99%	99%

A cleaning group has been instituted to oversee issues related to environmental cleanliness and also a planned deep cleaning programme.

### 3.7 Audits

An audit programme is in place and a number of audits have been performed by the infection prevention nurses and matrons to assess compliance for the following standards:

- Hand Hygiene
- Cleaning of equipment
- Cleaning of frequently touched surfaces
- Correct wearing of PPE (personal protective clothing)
- Isolation practice
- Screening for MRSA, CPE and SARSCoV2

Results are reported through the Silver Command and the Infection Prevention committee and any issues highlighted to the individual areas.

## 4. Sepsis

There has been an improvement in the management of sepsis with the principal KPIs either achieved or significantly improved. The most clinically important KPI, antibiotic delivered within one hour, is being consistently achieved. The data on blood cultures has been improved through a system of early validation and only reporting validated data. This KPI is consistently achieved. Usage of the screening tool and the sepsis bundle has improved and screening fails are circulated to the individuals concerned.

The lead for sepsis Dr Al-Rawi continues to lead the sepsis group to ensure continuous improvement of the care of patients with sepsis at LHCH. The group comprises Dr Al-Rawi, Dr Alessandro Gerada, (consultant microbiologist), the infection prevention nurses, the sepsis audit analyst, outreach nurses, EPR representation and ITU staff

The drive continues to increase further the use of the screening tool and ensure all KPIs can be measured via EPR. The mortality from sepsis remains low. The weekly and year to date screening data is presented in the executive harm report. High risk screens are identified and the KPIs presented for that subgroup. Data is fed back to the wards and areas and a clear line of responsibility established. Any fails of the KPIs are reviewed by the sepsis lead or the medical director to ensure accuracy and appropriateness.

There is a continued education program to deliver teaching sessions for junior doctors outreach and hospital coordinators. Trust wide reminders through screen savers and desktop backgrounds continue. There is a new sepsis eLearning package which is included in mandatory training for clinical staff.

## **5. 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.

## **6. Recommendation**

The Board of Directors are asked to note the contents of this report and continued high standards of infection prevention and control.