

Board of Directors (in Public)

Item 2.4

Subject: Director of Infection Prevention and Control (DIPC)
Quarterly Report
Date of Meeting: 4th September 2018
Prepared by: Nicola Best/Infection Prevention Nurse Specialist
Presented by: Dr Nigel Scawn/Associate Medical Director
Reason for Report: To Note

BAF Ref	Impact on BAF
1.1,1.2	None – This paper provides Assurance that infection risk is being managed effectively.

1. Executive Summary

This paper provides information and an update on infection prevention and control issues for the time period 1st April – 31st June 2018. Previous reports have covered the period up to March 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.

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

MSSA Bacteraemia

This patient developed a deep sternal wound infection post cardiac surgery and this was identified as the source of the bacteraemia. A patient review has been commenced and sent to the surgical division for discussion.

Clostridium Difficile

A patient review has been completed and discussed at Critical Care delivery group, although no lapses of care related to C difficile infection were identified, learning points related to bowel care management protocols were identified and will be addressed by Critical Care.

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.

30 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 (positive screening swab and tracheal aspirate)

3.1.3 Carbapenemase Producing Enterobacteriaceae (CPE)

5 new cases were identified, 2 of these were designated as Trust attributable. One of the patients was colonised only (rectal swab) however the other patient had CPE isolated from a central line tip.

The samples were sent to the reference lab and both have been identified as the same strain with the same genetic profile.

The 2 patients did not overlap during their time in the Trust, the first patient was discharged 19 days before the admission of the second patient. Although they had admissions to the same wards (Birch, CCU, POCCU) they were not admitted to the same rooms/bedspaces

Retrospective reviews have shown that this particular strain has been detected in 3 other patients prior to this, in 2016 and 2017. However none of these patients have overlapped in time, either during their inpatient stay or during outpatient visits.

These cases and possible routes of transmission will be investigated further and updates provided to the Infection Prevention committee.

3.3 Surgical site group

A number of actions have been completed however some require completion by the theatre department. A new process has been introduced to provide decolonisation treatment (antimicrobial wash and antimicrobial nasal gel) for cardiac surgical patients so that they can use this at home, a number of days prior to their surgery. This will be monitored and audited by the infection prevention nurses.

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.

	April	May	June
Results of Compliance Audits	99.4%	99.7%	99.7%
No. of Observations	780	588	608

3.4.1 Other audits

A national infection control audit tool has been adapted by the infection prevention nurses and has been used to audit all wards and clinical areas within the Trust this quarter.

The audits are usually performed by the infection prevention nurse with the link nurse for that area and/or other staff as appropriate. All areas reached the overall target score (85%) but issues were identified across the Trust related to; cleanliness of equipment, inappropriate storage of products, disposal of waste products, and the availability of alcohol gel. Individual scoresheets and action plans were submitted to all ward managers and the matrons to address the issues raised.

The ward managers have performed audits of peripheral line insertion and care and urinary catheter insertion and care. Compliance with the audit programme has improved and actions have been taken to address any areas of non-compliance. An electronic system of collecting audit data has been developed by the infection prevention team is being piloted by 2 wards currently.

3.5 Cleanliness

3.5.1 Environmental Cleanliness

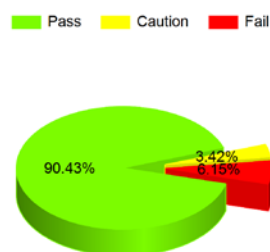
A standard monitoring tool is used by the Hygiene supervisors to assess environmental cleanliness. The target is an overall Trust score of 95%, with an individual score for clinical areas of 95% or above.

All clinical areas scored above the target score within this time period. The public corridors scored below the target score in June this was due to staff being redeployed to clean bed spaces in the evenings due to high numbers of patient movements.

The Trust has commenced the introduction of disposable antimicrobial curtains in clinical areas.

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.



There has been an increase in the number of “fails” over this quarter, including from equipment and furniture in bedspaces that had been cleaned and were ready for patient admissions. These items included keyboards, bedrails, bedside tables and patient chairs. All equipment that failed was cleaned at the time and results fed back to individual ward managers. These results have also been discussed with the Hygiene service manager and supervisors who have introduced additional audits, monitoring and training to address the issues raised.

4. Sepsis

The lead for sepsis Dr Al-Rawi has drawn together a working group on sepsis to address the issues highlighted above and 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.

There has been optimisation of EPR workflow. This includes 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 open the sepsis bundle on completion of high risk screening.

The use of NEWS2 is under discussion with NHSE.

The number of sepsis patients being treated ad hoc off bundle is reducing.

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. Recommendations

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