

Board of Directors (in Public) Item 2.2

Subject: Director of Infection Prevention and Control (DIPC) Report Q1 20/21
Date of Meeting: Tuesday 28th July 2020
Prepared by: Nicola Best - IPN Specialist; Dr Raphael Perry – MD/DIPC
Presented by: Dr Raphael Perry – Medical Director/DIPC
Reason for Report: To Note

BAF Ref	Impact on BAF
1.1,1.2	Possible patient harm

1. Executive Summary

This paper provides information and an update on infection prevention and control issues for the 1st quarter of this financial year 1st April till 30th June 2020. Previous reports have covered the period up to 31st March 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 an action plan and 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. Monitoring and Audits

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 2020- June 2020 (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)	Internal target = 7
3.	Trust attributable E coli bacteraemias	0 (0)	Internal Target for the total of all these Gram negative bacteraemias = 9
4.	Trust attributable Klebsiella species bacteraemias	0 (0)	
5.	Trust attributable Pseudomonas aeruginosa bacteraemias	0 (0)	
6.	Trust attributable Clostridium Difficile infection	1 (1)	Target not set yet

A patient review has been performed for the MSSA bacteraemia which identified that the probable source was a chest infection. Learning points were shared with Critical Care.

3.1.2 Clostridium difficile

One patient developed Clostridium Difficile infection during this time period and had a full patient review performed. The patient was an elective admission angiogram and proceeded for cardiac surgery and 13 days after admission developed diarrhoea. There were no issues identified related to antibiotic prescribing, cleanliness, isolation or sampling and the audits performed around this time did not identify any problems. There were no other patients positive for C difficile in the Trust at the time. Therefore no lapses in care were identified although there were some issues noted with documentation which have been highlighted to staff by the ward manager.

3.1.3 Total LHCH attributable MRSA cases

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.

There have been no cases of Trust attributable MRSA.

3.1.4 Carbapenemase Producing Enterobacteriaceae

There have been no cases of Trust attributable CPE.

3.1.5 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. However there was an outbreak on Oak ward, which has been reported externally through the command structure. See appendix 1 with report and action plan.

A command structure has been established within the Trust to ensure effective management and communication during the Covid19 pandemic. Separate groups have now been convened to review, monitor and oversee different aspects of the overall Covid 19 plan. These include testing, personal protective equipment (PPE), fit testing, cleaning and equipment. These groups will report to the Infection Prevention Committee.

COVID 19 Patients April – June 20 –Attribution	Number of patients
Community-Onset - First positive specimen date <=2 days after admission to trust.	37
Hospital-Onset Indeterminate Healthcare-Associated - First positive specimen days 2-7 days after admission to trust,	14
Hospital-Onset Probable Healthcare-Associated – First positive specimen date 8-14 days after admission to trust,	12
Hospital-Onset Definite Healthcare-Associated – First positive specimen days 15 or more days after admission to trust.	3

3.2 Hand Hygiene

Clinical areas carry out a monthly observational audit of hand hygiene in their area, in addition to another 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	100%	100%	100%
No. of Observations	139	174	191

Although audits performed by the wards show good compliance audits separately performed by the infection prevention nurse showed that not all staff were compliant with the hand hygiene and “bare below the elbows” policy, this has been fed back to individual staff members, ward managers and the Infection Prevention Committee. The uniform and workwear policy, including bare below the elbows requirements, will be relaunched in July.

3.3 Cleanliness

3.3.1 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. The monthly overall scores for the Trust are given below. However one clinical area (Cedar) did not meet the required standard in June, this was due to the impact of staff shortages. The problem was rectified as soon as it was noted.

	April	May	June
Results overall of Compliance Audits	99%	98%	99%

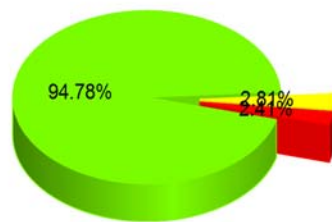
3.3.2 Monitoring of Equipment cleanliness

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.

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

Apr-June Measurements: 249
 Pass: 236
 Caution: 7
 Fail: 6

Pass Caution Fail



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. There remain issues with EPR that make collection of blood culture data appear delayed. 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 objectives have been clarified and simplified using MEWS scoring. MEWS ≥ 5 and suspicion of infection do not need screening and should be treated within one hour preferably using the sepsis bundle. Two consecutive MEWS ≥ 3 and suspicion of infection need the screening tool completing and if high risk treated within one hour. There is a national drive to use NEWS2 scoring rather than MEWS however the sepsis group and the infection prevention committee consider that this is not the best tool for our specific patient population. Discussions with commissioners have led to LHCH continuing to use MEWS with NEWS2 being monitored and applied to transfer patients.

Plans for optimisation of EPR workflow have been completed other than making the collection of blood culture timing to be a mandatory field. 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 are all functional.

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. 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.

There has been a significant impact of the Covid 19 outbreak.

6. Recommendations

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

Also to note the attached appendix the impact and changes to the plan secondary to the Covid 19 pandemic.

Appendix 1

LHCH –Oak ward Outbreak

Background

Oak ward is currently functioning as a pre-op surgical ward. It consists of side rooms and 2 four-bedded bays. All patients should be screened for SARS-CoV2 either 24/48 hours before admission or on admission (if they cannot attend a drive through screening). Patients are cared for in single rooms until the results of their screens are available. If negative results are available surgery proceeds as planned, if positive results patients are discharged and the surgery rescheduled.

The Infection prevention nurse (IPN) received a phone call on 11/6/20 from a neighbouring Trust to inform them that a patient recently transferred from LHCH had tested positive. The IPN noted this and checked the patient records, the protocol had been followed, there had been no known contact with any positive patients and, as the positive swab was 4 days after discharge, contact tracing was not initiated.

The following day the IPNs received a phone call from another Trust informing them that a patient transferred from LHCH had tested positive for SARS-CoV2 on transfer. A patient review was undertaken. The patient had been cared for in a side room and then Bay 2 on Oak ward, a 4 bedded bay with shared bathroom. The EPR team was contacted to provide a report from patient flow detailing all movements and possible contacts from the bay. Also the IPNs were made aware that 2 members of staff from Oak ward had tested positive, the staff contacts had been traced by the LHCH team and following a risk assessment some members of staff were advised to self-isolate for 14 days.

Meeting and Actions

A meeting was convened the afternoon of 12/6/20. In attendance were: Deputy Director of nursing, IPNs, Head of Nursing for Surgery, Divisional manager for surgery, Divisional manager for Medicine.

Actions were agreed and implemented as below.

The Director of Infection Prevention and Control was informed. Over the next 3 days 2 of the identified contacts also tested positive. A detailed timeline was produced and initial findings and actions presented at the next Gold Command meeting.

Action	Date/Time	Responsible	Update
Close the identified bay to admissions	12/6/20	Hospital co-ordinators	Completed
Deep clean bay	13- 14/6/20	Hygiene supervisor	Completed
Deep clean all shared equipment	12/6/20	Nurse in charge Oak	Completed

Identify and trace all patients who had been in the relevant bay at the identified time period	12/6/20	EPR team/IPN	Completed
Inform contact patients, and staff in relevant areas, move patients to single rooms, high degree of suspicion to test. If discharged home advised to self isolate for 14 days from when discharged from the bay.	12/6/20	HON Surgery IPN	Completed
Initiate some testing of asymptomatic staff on Oak and Critical care	13-14/6/20	Staff Test team	Completed
Ensure staff wear masks in all public areas not just in the clinical area as per new guidance	15/6/20	Matron for Surgery/ Ward manager	Completed
Review procedures, audit results (cleaning, equipment, hand hygiene)	15/6/20	IPN/Matron	Completed
Review patient placements e.g. if patient initially pre op but then extended length of stay occurs.	15/6/20	HON/ Divisional Manager/AMD Surgery	Completed
Individual patient reviews for all positive patients	17/6/20	IPNs	Completed
Report externally as per recently received guidance and complete II MARCH form.	19/6/20	IPN/DDON	Completed