

Board of Directors (in Public)

Item 2.3

Subject: DIPC (Director of Infection Prevention and control) Report Q4
Date of Meeting: 30th April 2024
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Presented by: Manoj Kuduvalli (Medical Director)

BAF Ref	Impact on BAF
BAF 1	Assurance on the infection prevention and control measures in place

1.0 Executive Summary

This paper provides information and an update on infection prevention and control issues for the 4th quarter of this financial year, 1st January until 31st March 24. Previous reports have covered the period up to the end of December 2023.

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

Working groups are in place to monitor and improve specific issues related to the prevention or management of infection including cleanliness, sepsis management, antimicrobial stewardship and surgical site infections.

2.0 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 and patient safety.

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.

3.0 Surveillance

There is a requirement that bacteraemias (blood stream infections) caused by certain bacteria and also *Clostridioides difficile* infections are monitored and reported to UKHSA (UK Health and Security Agency) on a monthly basis.

In addition to this, the Infection Prevention team continuously monitor and carry out surveillance on antibiotic resistant organisms or organisms of concern.

3.1 Mandatory Reporting – Bacteraemias (Blood cultures)

	Attributable cases January- March 24 (Year to Date-Trust attributable)	Threshold
Methicillin Resistant <i>Staphylococcus aureus</i> (MRSA) bacteraemias	0 (0)	0
Methicillin sensitive <i>Staphylococcus aureus</i> (MSSA) Bacteraemias	2 (6)	7 (internal)
<i>E coli</i> bacteraemias	3 (6)	6
<i>Klebsiella</i> sp. Bacteraemias	1 (6)	1
<i>Pseudomonas aeruginosa</i> bacteraemias	1 (2)	1

Post infection reviews have been undertaken for all these patients, in conjunction with relevant staff and any issues and actions required have been identified. (See below for summaries).

The relevant divisional governance meetings discuss these patient reviews and learning points and oversee any associated action plans that have been developed.

Month	Bacteraemia	Summary	Learning points and comments
January	MSSA (Cedar Ward)	The patient developed a surgical site infection following cardiac surgery, which was the cause of the bacteraemia.	Learning points were identified related to the consistency of wound documentation.

	MSSA (Oak ward)	The patient was admitted with recurrent malignant pleural effusions and developed a pleural infection which was the cause of the bacteraemia.	The initial infection was probably related to the pleural tap or drain inserted in the transferring hospital.
March	E coli (Cedar ward)	The patient developed a urinary tract infection which was the probable cause of the bacteraemia.	Learning points were identified related to catheter care, sepsis screening and escalation.
	E Coli (Cedar ward)	The patient was admitted for cardiac surgery and then developed acute cholecystitis, whilst an inpatient, which was the probable cause of the bacteraemia.	No learning points identified.
	E Coli and Pseudomonas (Oak ward)	The patient was admitted for thoracic surgery and during his stay aspirated which caused him to develop pneumonia and sepsis with multiple organisms.	No learning points identified.
	Klebsiella sp. (CCA)	The patient had cardiac surgery and many complications following this, leading to a prolonged stay on Critical Care. The cause of the bacteraemia could not be definitively identified.	Intravascular line care has been reinforced and additional blood culture training provided.

3.2 Mandatory Reporting - Clostridioides difficile Infection

	Attributable cases January – March 24 (Year to Date)	Threshold for 23/24
Clostridioides difficile infection (C. difficile toxin positive)	1 (3)	2

One patient was identified as C. difficile toxin positive during this time period. A patient review was performed with relevant staff. Areas of good practice were noted in relation to monitoring, sampling and isolation.

Some issues related to antibiotic prescribing were identified which were addressed by the pharmacy department.

3.3 CPE cases

There were 8 new patients with CPE in this time period, 2 were attributable to the Trust. There was no identified connection between the patients and they were isolated in accordance with Trust policy.

3.4 MRSA cases (all isolates)

15 patients were identified as MRSA positive in this time period, most were identified as positive prior to, or on admission. 2 were identified as Trust attributable although they were not connected. The patients were isolated and treated in accordance with Trust policy.

3.5 Respiratory Viruses

SARSCoV2

A number of patients tested positive for SARS coV2 in this period and the breakdown is given below. The testing programme has significantly reduce and patients are only tested now if they develop symptoms of respiratory viral infection. These cases were reported to the national system.

All patients were isolated in accordance with guidelines.

COVID 19 Patients January - March 2024	Numbers of Patients
Community-Onset – First positive specimen date <=2 days after admission to trust.	3
Hospital-Onset Indeterminate Healthcare-Associated – First positive specimen date 3-7 days after admission to trust.	3
Hospital-Onset Probable Healthcare-Associated - First positive specimen date 8-14 days after admission to trust.	0
Hospital-Onset Definite Healthcare-Associated – First positive specimen date 15 or more days after admission to trust.	3

Influenza

There were 11 patients who tested positive for influenza during this time frame, 3 were community onset and 8 were potentially or definitely, hospital onset. 2 of the patients were contacts on one ward and 2 patients were contacts on another ward.

All patients were isolated with transmission based precautions and treated as per Trust policy. Contact patients were identified and screened and treated with prophylactic antivirals, where relevant.

3.6 Measles

A number of outbreaks of measles have been reported nationally and concerns have been raised of further resurgence and ongoing outbreaks. A risk assessment of measles preparedness has been performed and it has been identified that a proportion of staff do

not have documented evidence of vaccination or immunity. The Occupational Health provider has been requested to contact staff and update records.

There have been 0 cases of measles identified as LHCH to date.

4.0 Audit programme

An annual audit programme has been developed and a number of audits completed to provide assurance of compliance with national infection prevention and control standards. These audits have been carried out by Infection prevention nurses, matrons and ward staff. These include:

- Infection prevention and control standards (Equipment, environment, waste disposal, sharps disposal, linen handling)
- Hand Hygiene
- Peripheral Line care
- Urinary catheter care
- Endoscopy audit

5.0 Cleanliness

A new audit tool and programme to monitor cleanliness across the Trust has been developed in line with the National Standards for Cleanliness. A multi-disciplinary group including infection prevention nurses, matrons and Hygiene service supervisors have performed the audits ensuring a collaborative and standardised approach to monitoring cleanliness.

	January	February	March
Areas audited	12	12	12
Average score	97.8%	97.9%	97.6%

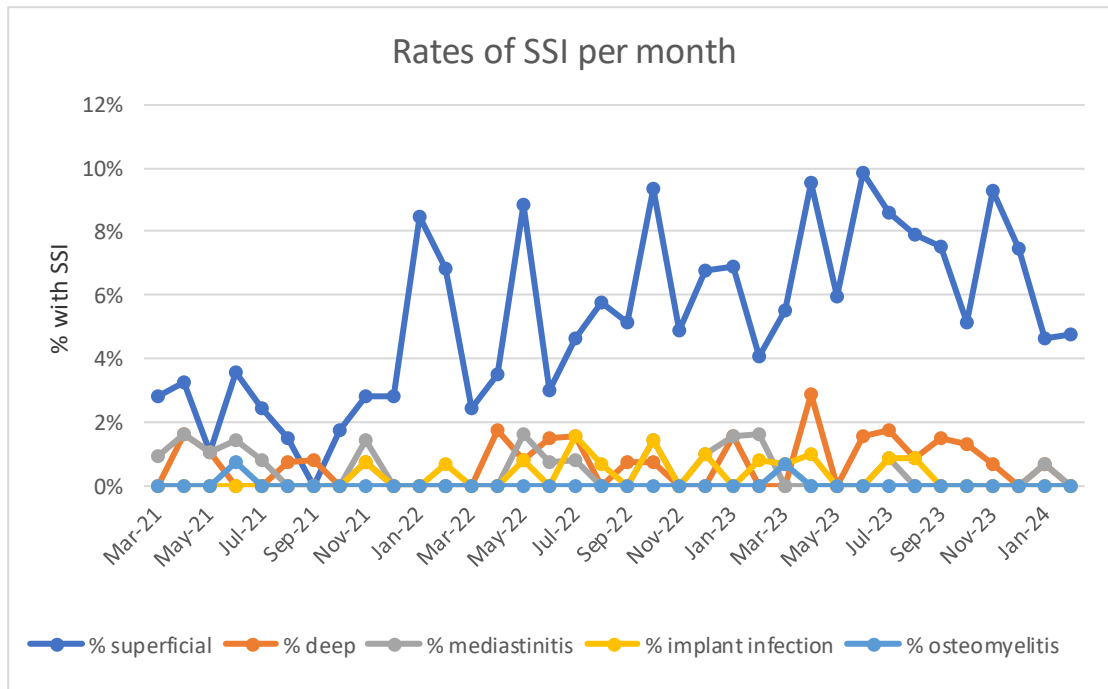
6.0 Surgical Site Infection (SSI)

The Infection prevention team have a robust surveillance system for the continuous monitoring of SSI following cardiac surgery. Data on all patients undergoing cardiac surgery is collated every month and categorised into different classifications of infections i.e. superficial, deep incisional, mediastinitis, implant infections, osteomyelitis. The graph is shown below. The rate of severe infections has decreased compared to a similar time period in the previous year.

The SSI prevention group meets regularly and has a wide-ranging action plan to improve SSI. Data is presented to the Infection Prevention Committee and the Surgical Governance Committee.

In-depth analysis examining contributory factors that may influence the rates has been undertaken and shared with the surgical division.

Additional audits have been undertaken in the theatre department.



7.0 Antimicrobial Stewardship

Antibiotic compliance audits have been performed and data collection for the CQUIN target for intravenous to oral switch continues. Issues related to compliance with the Trust formulary and correct documentation for antibiotic indications have been identified and an action plan to address this has been agreed by the Antimicrobial Stewardship group.

8.0 Summary

The surveillance of infections continue to be monitored and all reportable infections are reviewed to identify any trends or learning points, which are shared with relevant committees and groups. Work is on-going to ensure the infection prevention quality and safety plan is fulfilled and that a robust audit programme is in place.

A number of working groups have been established to oversee issues related to the prevention or management of infection including the Cleaning Group, Sepsis Group, Antimicrobial stewardship Group and Surgical Site infection Group. Each of these have their own audit schedule and action plans.

9.0 Recommendations

The Board of Directors is asked to note the contents of this report, the ongoing work and the continued low incidence of reportable infections.