

Board of Directors (in Public)

Item 2.1

Subject: DIPC (Director of Infection Prevention and control) /HCAI framework Report Q3
Date of Meeting: January 2025
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Presented by: Mr Manoj Kuduvalli (Director of IP&C)

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 3rd quarter of this financial year, 1st October until 31st of December 24. Previous reports have covered the period up to the end of September 2024.

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 have 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.

NHS England have set thresholds for each Trust for the reduction of C. difficile infections and E coli, Klebsiella and Pseudomonas bacteraemias. Thresholds set for LHCH are some of the most ambitious in England, even when taking into consideration the number of admissions/bed days. Details are in the table below.

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

3.1 Mandatory Reporting – Bacteraemias (Blood cultures)

	Attributable cases July to September 24 (Year to Date-Trust attributable)	Threshold
Methicillin Resistant Staphylococcus aureus (MRSA) bacteraemias	0 (1)	0
Methicillin sensitive Staphylococcus aureus (MSSA) bacteraemias	4 (3)	7 (internal set threshold)
E coli bacteraemias	3 (3)	5
Klebsiella sp. bacteraemias	1 (4)	5
Pseudomonas aeruginosa bacteraemias	1 (2)	1

Post infection reviews have been undertaken for all these patients, in conjunction with the relevant staff from each division.

Reviews and learning points have been discussed at the relevant divisional meetings. In some cases the cause of the bacteraemia could not be established and in some cases there were no lapses in care identified or the infection was classed as unavoidable.

Some learning points that were identified included:

To ensure consistency of documentation in fluid balance charts and catheter care

To review drain care and information given on discharge for thoracic patients with drains in situ

To improve compliance with SSI prevention bundle
To review the process for diagnosis and treatment of patients with bacteraemias

These actions will be taken forward by the relevant divisions or relevant groups e.g SSI group as appropriate.

3.2 Mandatory Reporting - Clostridioides difficile Infection

	Attributable cases July 24 (Year to Date)	Threshold
Clostridioides difficile infection (C. difficile toxin positive)	3 (3)	2

There were 3 Trust attributable cases in this time period, all patients were cared for with isolation precautions after diagnosis.

All the patients were cared for on different wards and there was no identified link between them. However there was a potential link between one of the patients and a patient who had been previously cared for in the same room with C difficile (not Trust attributable). The room had been cleaned in between patients but the UV_C decontamination had not occurred. Additional methods of decontamination are being explored.

Learning points identified from the reviews include providing information to patients to ensure they highlight to nursing staff if they have diarrhoea and ensuring documentation in bowel charts is completed correctly.

3.3 Carbapenemase Producing Enterobacterales (CPE) cases

There were 10 new patients with CPE in this time period, only 2 were attributable to the Trust. The other patients were positive before or on admission. One of the patients was positive on the initial test but the culture failed to isolate any CPE organisms from the specimen. There was no established link between the patients.

3.4 MRSA cases (all isolates)

14 patients were identified as MRSA positive in this time period, only 1 was potentially Trust attributable, this was a patient with a leg wound, present on admission, which was swabbed 3 days after admission therefore it was not determined when this was acquired.

3.5 Respiratory Viruses

A number of patients tested positive for respiratory viruses in this time period.

1 tested positive for Influenza B on admission.

8 tested positive for Influenza A, 6 of these tested positive on admission or within 2 days of admission. All of the patients were isolated and any contact patients who were in a bay with a positive patient were identified and screened and given antiviral prophylaxis as per policy.
5 patients tested positive for SARS-CoV2. All were isolated in accordance with Trust policy.

3.6 Norovirus

1 patient became infected with Norovirus although no other transmission was identified.

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. The following audits have been carried out by Infection prevention nurses, matrons and ward staff.

These include:

- Decontamination of equipment
- Waste and sharps handling and disposal
- Linen handling
- Environmental cleanliness
- Screening, decolonisation and prophylaxis before surgery
- Hand Hygiene
- Peripheral Line care
- Urinary catheter care
- Endoscopy

Feedback on audit results have been given to each area, who have implemented actions where relevant.

5.0 Cleanliness audits

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 in the clinical areas, ensuring a collaborative and standardised approach to monitoring cleanliness. The average scores across the Trust, for each month are given below.

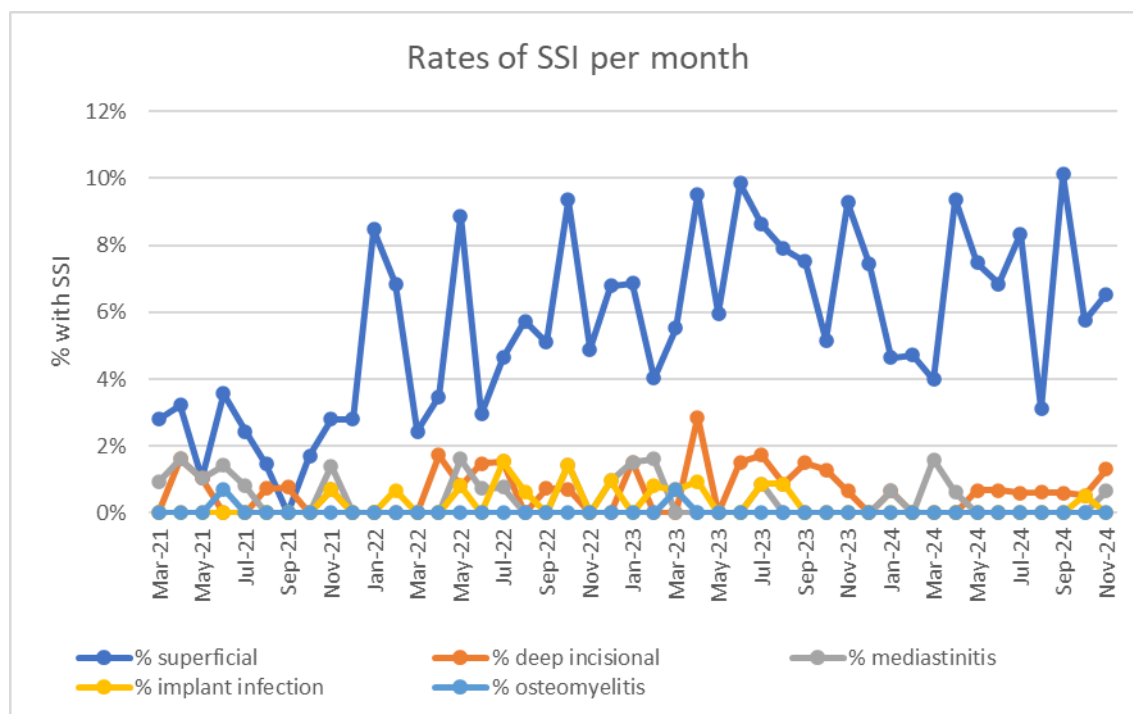
	October	November	December
Clinical areas/wards audited by multidisciplinary team	12	12	12
Average score	97.8% (Range 94.7-100%)	98.2% (Range 95.1-99.5%)	98.4% (Range 95.8-100%)

Areas are given a star rating depending on the score and the risk category for that area. All clinical areas were awarded 4 or 5 star ratings.

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

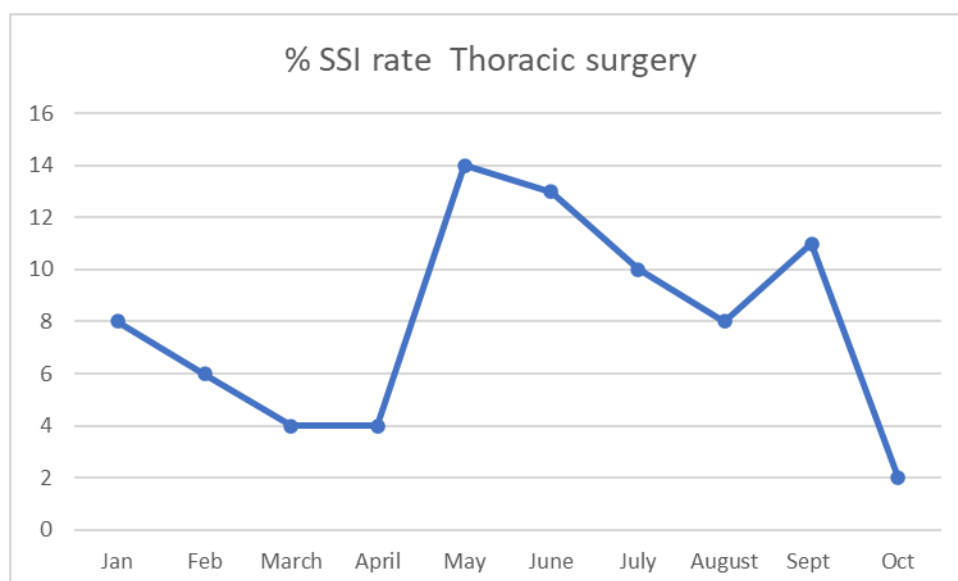
is collated every month and categorised into different classifications of infections i.e. superficial, deep incisional, mediastinitis, implant infections, osteomyelitis.



The SSI prevention group meets regularly and has an ongoing action plan to improve SSI. Data is presented to the Infection Prevention Committee and the Surgical Governance Committee.

Reviews of the severe infections (deep, mediastinitis, implant, osteomyelitis) are undertaken to identify if there are any trends or learning points. The rates of severe infections have reduced over the last 2 years.

From January 24 the infection prevention team have been collecting information on patients who have had thoracic surgery. Another working group has been set up specifically to address the issues raised related to thoracic surgery. The data is given below.



7.0 Antimicrobial Stewardship

The antimicrobial stewardship group meets quarterly and an annual report on antimicrobial stewardship has been compiled by the antimicrobial pharmacist and submitted to the Trust Board. Microbiology ward rounds are continue each week with a multidisciplinary team. Antibiotic compliance audits have been performed and results fed back to relevant committees and to prescribers via the educational lead.

8.0 Sepsis

A sepsis group meets quarterly to monitor compliance, identify areas of challenge, and aims to continually improve all aspects of sepsis management and care. There is ongoing monitoring of compliance with key performance indicators on a weekly basis. The overall average scores for the quarter are given below.

Standard	Compliance Oct – Dec 24
Blood cultures taken prior to antibiotics	95.6%
Antibiotics within 1hr of a screen that identifies a possible high risk of sepsis	94.4%
Antibiotics within 3hrs of a possible high risk of sepsis	97.6%

Individual cases where targets aren't met are reviewed by the sepsis team with learning fed back to departments / individuals involved.

9.0 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.

10.0 Recommendations

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