

Board of Directors (In Public)
Item 2.1

Subject: DIPC (Director of Infection Prevention and control) /HCAI framework Report Q2
Date of Meeting: 15th October 2024
Prepared by: Nicola Best (Lead Infection Prevention and control nurse)
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 2nd quarter of this financial year, 1st July until 30th September 24. Previous reports have covered the period up to the end of June 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 now released the 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	1 (3)	7 (internal set threshold)
E coli bacteraemias	0 (0)	5
Klebsiella sp. bacteraemias	1 (3)	5
Pseudomonas aeruginosa bacteraemias	1 (1)	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
July	Klebsiella (Critical Care)	Patient admitted from another Trust for emergency aortic surgery. No definitive source identified.	To ensure consistency of documentation in medical device care
August	MSSA (Critical Care)	Urgent transfer from another Trust for aortic surgery. Prolonged stay on Critical Care. Ventilator acquired pneumonia.	To ensure blood cultures are requested and labelled correctly. To review audit programme for ventilator acquired pneumonia

	Pseudomonas aeruginosa (Critical care)	Urgent transfer from another hospital, very unwell, for emergency valve replacement. Multiorgan failure developed post operatively. No definitive source identified.	
--	--	--	--

3.2 Mandatory Reporting - Clostridioides difficile Infection

	Attributable cases July 24 (Year to Date)	Threshold
Clostridioides difficile infection (C. difficile toxin positive)	0 (0)	2

3.3 CPE cases

There were 9 new patients with CPE in this time period, only 1 was attributable to the Trust. The patient was isolated and cared for with the appropriate precautions, in accordance with Trust policy.

3.4 MRSA cases (all isolates)

24 patients were identified as MRSA positive in this time period, none were Trust attributable.

3.5 Respiratory Viruses

A number of patients tested positive for respiratory viruses in this time period, 17 tested positive for SARS-CoV-2 and 3 tested positive for influenza. All were isolated in accordance with Trust policy.

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:

- Isolation
- Screening, decolonisation and prophylaxis before surgery
- Hand Hygiene
- Peripheral Line care
- Urinary catheter care

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

5.0 Cleanliness

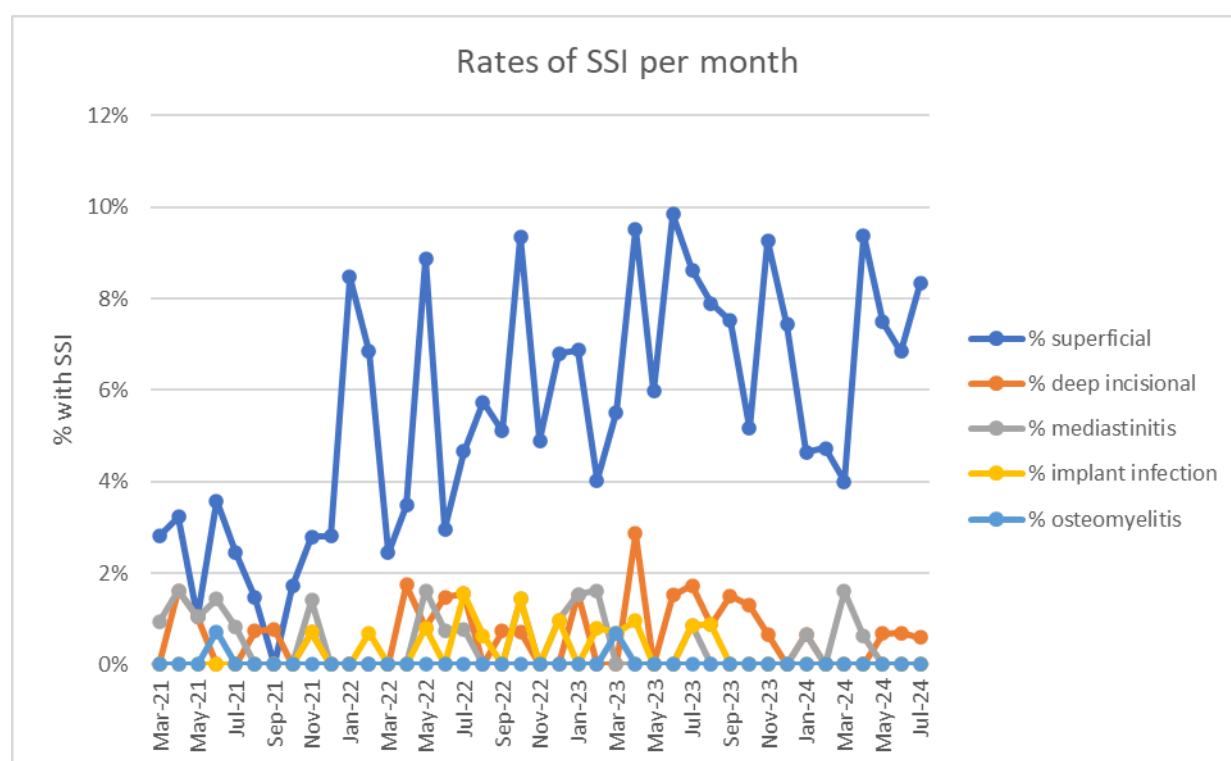
A new audit tool and programme to monitor cleanliness across the Trust has been developed in line with the National Standards for Cleanliness. A multi-disciplinary group including Infection prevention nurses, Matrons and Hygiene service supervisors have performed the audits in the clinical areas, ensuring a collaborative and standardised approach to monitoring cleanliness. The average scores across the Trust, for each month are given below.

	July	August	September
Clinical areas/wards audited	12	12	12
Average score	98.7%	98%	98%

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 apart from 1 theatre which had a 3 star rating on inspection but the issues were rectified immediately and the score increased.

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 year.

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 July – Sept 24
Blood cultures taken prior to antibiotics	95.3%
Antibiotics within 1hr of a screen that identifies a possible high risk of sepsis	93.6%
Antibiotics within 3hrs of a possible high risk of sepsis	95.6%

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.