

Board of Directors (in public)

Item 2.2

Subject: DIPC (Director of Infection Prevention and control) /HCAI framework Report Q4
Date of Meeting: 29th April 2025
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

Level of Assurance (please tick) To be used to provide the Board / Committee with a guide on the extent of assurance and evidence of assurance provided within the report		<input checked="" type="checkbox"/>
Level of Assurance	Description	
High	There is a strong system of internal control which has been effectively designed to meet the system objectives, and that controls are consistently applied in all areas reviewed.	<input type="checkbox"/>
Substantial	There is a good system of internal control designed to meet the system objectives, and that controls are generally being applied consistently.	<input checked="" type="checkbox"/>
Moderate	There is an adequate system of internal control, however, in some areas weakness in design and/or inconsistent application of controls puts the achievement and some aspects of the system objectives at risk.	<input type="checkbox"/>
Limited	There is a compromised system of internal control as weaknesses in the design and / or inconsistent application of controls puts the achievement of the system objectives at risk.	<input type="checkbox"/>
No	There is an inadequate system of internal control as weaknesses in control, and/or consistent non-compliance with controls could/has resulted in failure to achieve the system objectives.	<input type="checkbox"/>

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 of March 25. Previous reports have covered the period up to the end of December 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 and actions have been taken to address these.

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 January to March 25 (Year to Date-Trust attributable)	Threshold
Methicillin Resistant Staphylococcus aureus (MRSA) bacteraemias	0 (1)	0
Methicillin sensitive Staphylococcus aureus (MSSA) bacteraemias	1 (8)	7 (internal set threshold)
E coli bacteraemias	2 (5)	5
Klebsiella sp. bacteraemias	0 (4)	5
Pseudomonas aeruginosa bacteraemias	1 (3)	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.

MSSA

The probable cause of the bacteraemia was a midline associated infection. Some issues were noted in relation to documentation, care and management of line. Additional teaching and education has been provided by CCA nurses.

Pseudomonas aeruginosa

The cause of infection was not definitively identified. A review of the water systems on Critical care has been carried out in order to provide assurance regarding water safety and this will be reported to the Water Safety Group.

E coli

1 patient – the cause of the bacteraemia was acute cholecystitis, and the infection was classed as unavoidable.

1 patient – the cause of the bacteraemia was a urinary tract infection. A number of issues were identified related to documentation, management and care of catheters and treatment of urinary tract infections. A working group to address some of these issues has been convened.

3.2 Mandatory Reporting - Clostridioides difficile Infection

	Attributable cases January-March 25 (Year to Date)	Threshold
Clostridioides difficile infection (C. difficile toxin positive)	1 (4)	2

There was 1 Trust attributable case in this time period.

There was no apparent link to any other patient with symptoms. The patient was isolated and treated in accordance with policy. The patient review was carried out with CCA and it was noted that there was a delay in staff sending a sample, possibly due to the fact that there is a lack of clarity about sending samples when a patient is on a nasogastric feeding regime. This has been raised at the safety huddles and the dieticians will also monitor this.

3.3 Carbapenemase Producing Enterobacterales (CPE) cases.

There were 4 new patients with CPE in this time period, all were known to be positive on transfer from other Trusts or were identified on admission, therefore not Trust acquired.

3.4 MRSA cases (all isolates)

34 patients were identified as MRSA positive in this time period, the majority were known to be MRSA positive or tested positive on admission. 2 patients were potentially Trust attributable, both had sputum samples positive taken some time after admission, the patients were not connected.

3.5 Respiratory Viruses

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

4 tested positive for Influenza B on admission.

8 tested positive for Influenza A, 4 of these tested positive on admission or within 2 days of admission. All 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.

3 patients tested positive for SARSCoV2. All were isolated in accordance with Trust policy.

3.6 Norovirus

There were no patients identified with Norovirus in this time period.

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.

Audit	Score	Actions
Compliance with pre-operative screening policy	91%	Results and correct policy feedback to relevant areas
Compliance with Critical Care screening policy	89%	Results and policy feedback to Critical Care
Endoscopy – practice, processes and equipment	100%	
Isolation of patients with specific infections– placement of patients, equipment, signage and notifications	100%	

The matrons and ward staff have carried out audits of practice related to peripheral lines, urinary catheters and hand hygiene. Results have been feedback to individual staff and relevant areas.

5.0 Cleanliness audits

An 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.

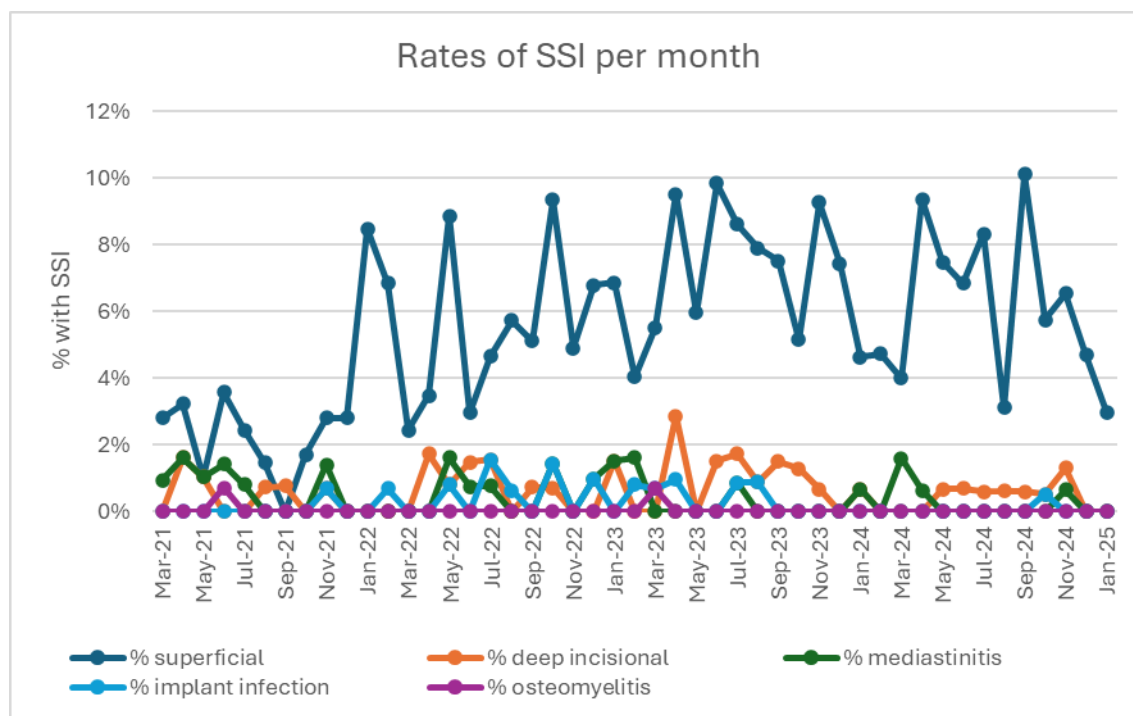
	January	February	March
Clinical areas/wards audited by multidisciplinary team.	12	12	12
Average score	98.5% (Range 95.2-100%)	98.6% (Range 96.6-100%)	97.4% (Range 93.5-100%)

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.

Some departments provide LHCH services but their cleaning services are provided by LUHFT e.g. Outpatients, Radiology, Pulmonary Function. There have been some issues noted in the past but there is now a joint monitoring programme with LHCH hygiene department and for this quarter they were 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.

It is recommended that patients undergoing cardiac surgery receive decolonisation treatment pre-operatively however audits showed some patients did not receive any treatment before surgery (15 % in November/December). A working group was convened, and a number of actions implemented, including additional education and awareness for ward staff, screen savers and additional input and monitoring from the Surgical Urgent care co-ordinator. A repeat audit for patients operated on in February showed the number of patients who did not receive any decolonisation pre-op had been reduced to 6%.

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 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 Jan – March 25
Blood cultures taken prior to antibiotics.	97 %
Antibiotics within 1hr of a screen that identifies a possible high risk of sepsis.	97 %
Antibiotics within 3hrs of a possible high risk of sepsis	98 %

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 continues 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.