

Board of Directors (in public)

Item 2.4

Subject: DIPC Report Q4 22/23
Date of Meeting: 26th April 2023
Presented by: Dr Raphael Perry – Medical Director/DIPC
Purpose of Report: To Note

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

Level of assurance (please tick one) To be used when the content of the report provides evidence of assurance					
√	Acceptable assurance Controls are suitably designed, with evidence of them being consistently applied and effective in practice	<input type="checkbox"/>	Partial assurance Controls are still maturing – evidence shows that further action is required to improve their effectiveness	<input type="checkbox"/>	Low assurance Evidence indicates poor effectiveness of controls

1. 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 2023. Previous reports have covered the period up to the end of December 2022.

This paper provides assurances that surveillance systems, audit and governance 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.

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. Issues

3. Surveillance

There is a requirement that bacteraemias (blood stream infections) caused by certain bacteria and also *Clostridium difficile* infections are monitored and reported to UKHSA (UK Health and Security Agency) on a monthly basis. Thresholds have been set by NHE England which were determined by the previous performance of the Trust. In addition, the infection prevention team continuously monitor other antibiotic resistant organisms or organisms of concern.

3.1 Mandatory Reporting – Bacteraemias (Blood cultures)

	Attributable cases January 23- March 23 (Year to Date-Trust attributable)	Threshold
MRSA bacteraemias	0 (0)	0
MSSA bacteraemias	2 (7) Oak ward, Cedar Ward	8 (internal)
E coli	2 (6) Cedar, CCA	6
Klebsiella sp.	3 (6) CCA, Birch	1
Pseudomonas aeruginosa	1 (4)	1

Post infection reviews have been undertaken for all these patients, in conjunction with Oak, Cedar, Birch and Critical Care any issues and actions required have been identified. (See below for summary)

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

Bacteraemia	Summary	Learning Points
MSSA	(1) A patient was admitted to the Trust the infection had been established in the community. However because the patient had been in the Trust within the previous month this is designated as a community onset healthcare associated infection and will be included in the numbers of infection (2) Source of infection may have been a peripheral cannula	Patient had a surgical site infection, issues raised will be monitored by the SSI group. Cannula should have been removed sooner. EPR documentation is being changed to encourage this
Klebsiella pneumoniae	Unable to identify sources for 2 patients For 1 patient the probable source was a urinary tract infection (UTI)	To ensure documentation in Cath lab reflect practice (currently being reviewed) To ensure devices are changed as advised in the policy To ensure blood cultures are taken when required and labelled appropriately
E coli	(1) Probable source was UTI (2) Probable source was central line	To ensure documentation and insertion and care of lines and catheters is completed

Pseudomonas aeruginosa	Probable source was UTI	To ensure no inappropriate flushing of catheters occurs. Feedback has been given to clinicians
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3.2 CPE cases

There were 5 new patients with CPE attributable to the Trust within this time period. 4 patients were identified on admission and 1 patient was identified following admission to Critical Care, as part of the routine screening programme.

3.3 MRSA cases (all isolates)

27 inpatients were identified as MRSA positive in this time period, the majority were identified as positive prior to, or on admission. 1 case was designated as Trust acquired.

3.4 Clostridium difficile Infection

	Attributable cases Jan – Mar 23 (year to date)		Threshold for 22/23
Clostridium difficile infection (C. difficile toxin positive)	0 (2) ACU		9

3.5 SARS CoV-2

A number of patients tested positive for SARS coV2 in this period and the breakdown is given below.

The majority of patients were identified as positive on admission.

COVID 19 Patients January – March 23	Numbers of Patients
Community-Onset – First positive specimen date <=2 days after admission to trust.	27
Hospital-Onset Indeterminate Healthcare-Associated – First positive specimen date 3-7 days after admission to trust.	7
Hospital-Onset Probable Healthcare-Associated - First positive specimen date 8-14 days after admission to trust.	5
Hospital-Onset Definite Healthcare-Associated – First positive specimen date 15 or more days after admission to trust.	2

All patients were isolated in accordance with guidelines.

These cases were reported to the national system.

3.6 Influenza

3 patients tested positive for influenza. 2 community acquired and 1 hospital acquired. The patients were not connected to each other. All were isolated with precautions according to guidelines.

4. Cleanliness

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 ensuring a collaborative and standardised approach to monitoring cleanliness and have monitored all clinical areas. Most areas scored above 95%, those that did not improved when re-audited.

Improvement work has begun in some areas that had been identified as potential cross infection risks e.g., Critical care dirty utility rooms

5. Water Safety – *Pseudomonas aeruginosa*

Pseudomonas aeruginosa isolates had been identified in water sample from Critical care. A number of remedial actions were undertaken. Resampling demonstrated improvements however a small number of outlets remained positive . An independent review and risk assessment of *Pseudomonas* control has been commissioned and was undertaken at the end of March. A new action plan will be developed following this which will be monitored by the water safety group.

6. Surgical Site Infection (SSI)

Surgical site infection data is now accurately collated using the IcNet surveillance tool. This captures all site infections up to 30 days after discharge and for valve surgery patients up to one year post discharge. The data is available 4-6 weeks after the end of each month. The number of cases has increased over 2022 partly due to more accurate reporting.

The SSI group met in March 23 and has an action plan and audit programme to improve SSI. Audits have shown some improvements in compliance with the SSI prevention bundle (see table below) and additional audits e.g. numbers of personnel within theatre and air movement within theatres have been added to the programme and commenced.

There have been additional patient reviews data collection on severe infections

SSI intervention	% Compliance (number of patients)
Pre op screen undertaken	90% (118/131)
Decolonisation treatment	92% (122/132)
Prophylaxis within 1 hr	99% (128/129)
Skin Prep	100% 131 Chlorhexidine , 1 other
Adequate Hair removal	61% (79/129)
Dressing undisturbed for 48 hrs	95% (125/131)

There have been ongoing discussions with the Information team regarding presentation of the data that is continuously being collected e.g. an automated process for generating statistical process charts (appendix 1) and but this has not been resolved as yet.

7. Summary

The surveillance of infections and routine audit data continue to be monitored and work is on-going to ensure the infection prevention quality and safety plan is fulfilled and a robust audit programme is in place.

8. Recommendations

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

SWIS: All Infections: Jan-18 to Dec-22

