

## Board of Directors' Meeting 12 September 2024

<b>Agenda item</b>	133/24		
<b>Report Title</b>	Report from the Director of Infection Prevention and Control Q1 2024/25		
<b>Executive Lead</b>	Hayley Flavell, Director of Nursing		
<b>Report Author</b>	IPC Team		
<b>CQC Domain:</b>	<b>Link to Strategic Goal:</b>	<b>Link to BAF / risk:</b>	
Safe	√ Our patients and community		<b>Trust Risk Register id:</b> 1040, 1070, 443, 923,444, 772,1018,855, 814
Effective	√ Our people		
Caring	√ Our service delivery	√	
Responsive	√ Our governance	√	
Well Led	√ Our partners		
<b>Consultation Communication</b>	NA		
<b>Executive summary:</b>	<ol style="list-style-type: none"> <li>1. This report provides the Board with information and assurance on the position in relation to the performance of the Infection, Prevention and Control (IPC) programme for Quarter 1 (April -June 2024).</li> <li>2. The Board's attention is drawn to sections under the hospital acquired in Methicillin-Resistant <i>Staphylococcus aureus</i> (MRSA), Clostridioides Difficile (CDI), Methicillin-Sensitive Staphylococcus (MSSA), Escherichia Coli (E. Coli), Klebsiella and Pseudomonas Aeruginosa bacteraemia.</li> <li>3. Key risks: 2 new risks have been reported in Quarter 1. Transmission of pertussis in hospital and the lack of MRSA screening compliance report since the implementation of Careflow. There is a risk of patients not been screened for MRSA leading to increased risk of transmission and HCAI.</li> <li>4. The HCAI thresholds were published in August, these will be included in reports from September 2024</li> </ol>		
<b>Recommendations for the Board:</b>	<p>The Board is asked to:</p> <p><b>Note</b> the issues highlighted, particularly with regard to the increasing rate of C. diff/MSSA Bacteraemia/EColi Bacteraemia</p>		
<b>Appendices (In Supplementary Info Pack):</b>	<p>Appendix 1 HCAI targets 2024/25 Appendix 2 HCAI graphs Appendix 3 – Health and Social Care Act 2008 self-assessment tool</p>		

## 1.0 INTRODUCTION

This paper provides a report for Infection Prevention and Control for Quarter 1 (April – June 2024) against the 2024/25 objectives for Infection Prevention and Control. An update on hospital acquired infections: - Methicillin Resistant *Staphylococcus aureus* (MRSA), Clostridioides Difficile (CDI), Methicillin-Sensitive Staphylococcus (MSSA), Escherichia Coli (E. Coli), Klebsiella and Pseudomonas Aeruginosa bacteraemia for April – June 2024 is provided. An update in relation to Covid-19 is also provided. The report also outlines any recent IPC initiatives and relevant infection prevention incidents. The updated IPC BAF is also included. The HCAI targets have recently been published for 2024/25 (Appendix 1). These will be included in reports from September 2024.

## 2.0 KEY QUALITY MEASURES PERFORMANCE

### 2.1 MRSA Bacteraemia

The target for MRSA bacteraemia remains at zero cases for 2024/25. In Q1, there were three MRSA bacteraemia cases, two occurring over 48 hours after admission and one within 28 days of discharge. Post-infection reviews identified several key learning points, timely VIP checks, complete MRSA screening on admission, improved documentation of blood cultures improved training for new starters regarding MRSA protocols, prompt decolonisation, and adjusting vancomycin dosing independent of dialysis timing. Good practices identified were that patients were promptly isolated and once decolonisation was started, it was given fully with no missed doses.

### 2.2 Clostridioides Difficile

The Trust trajectory for C diff cases in 2024-25 was released in quarter 2, (no more than 98 cases). There was a total of 20 cases of C diff for Quarter 1 2024/, table 2 appendix 2. 9 of these cases occurred greater than 48 hours after admission (post 48) and the remaining 11 cases had recent contact in the Trust in the 28 days prior to the positive sample (recent contact). This is a rate of 27.5 per 100,000 bed days and is a decrease since the last quarter (30.2 per 100,000 bed days).

As part of the C. diff improvement work, a “Deep Dive” multidisciplinary event was held in April, with the support of the Regional Assistant Director of Infection Prevention and Control. The event was well attended and has resulted in five work streams that are the focus for improvements. The monitoring is via IPCOG monthly, where the overarching action plan will be presented as well, any escalations will be made to IPCAC.

### 2.3 E. coli Bacteraemia

The target for 2024/25 was released in Quarter 2, (no more than 146 cases). In Q1 there were 48 cases attributed to the Trust, table 3, appendix 2. 13 of these cases were post 48 hours of admission, and the remaining 35 cases had recent contact with the Trust in 28 days prior to the infection. 2 cases in Q1 were considered to be device or intervention related with the source in both being Urosepsis. Further reviews of these cases are going to be undertaken by the IPC Doctor, to review the breakdown between community sources and hospital sources, and possible underlying drivers for the increase.

### 2.4 MSSA Bacteraemia

There is no nationally set target for MSSA, the Trusts MSSA bacteraemia rate is significantly higher than other comparable acute trusts within region table 4, appendix 2. The reasons behind this are not clear at present but there is evidence that a proportion of these cases are developing in patients in the community prior to hospitalisation. An in-depth investigation will look at the breakdown between community sources and hospital sources, and possible underlying drivers for the increase. 15 cases identified that were attributed to the Trust in quarter 1. 10 of these cases were post 48 hours, and the remaining 5 cases had been in hospital in the 28 days prior to the positive sample. All post 48 cases deemed to be device or intervention related have an RCA completed. In Q1 of 2024/25 this concerned 2 of the 10 post 48 cases. In both cases the source was unknown.

## **2.5 Klebsiella Bacteraemia**

The target for 2024/25 was released in Quarter 2, (no more than 36 cases).

Q1 2024/25 there were 5 cases of Klebsiella Bacteraemia attributed to the Trust, cases are shown in appendix 2 table 5. 1 of these cases was post 48, and the remaining 4 cases had been an inpatient in the Trust within 28 days of the infection. None of the post 48 cases were considered to be a HCAI.

## **2.6 Pseudomonas Aeruginosa**

The target for 2024/25 was released in Quarter 2, (no more than 19 cases).

In Q1 2024/25 there were 3 cases of Pseudomonas Aeruginosa attributed to the Trust, cases are shown in table 6, appendix 3, all 3 had recent contact with the Trust.

## **2.7 Root Cause Analysis Infections for MSSA and E. Coli Bacteraemia**

In Q1, 10 MSSA and 13 E. coli bacteraemia cases were identified, with two from each group requiring an RCA. Key learnings was identified. Improvements focused on sharing lessons in staff meetings, enhanced IPC training, and continuous education on best practices, including hand hygiene and blood culture protocols. This is monitored through divisional reports in IPCOG.

## **2.8 MRSA Elective and Emergency Screening**

Currently we are unable to produce this report as when the new careflow system was introduced the data source was not found as it was previously semahelix. Business intelligence are rebuilding this SQL report but are not able to give us a timeframe. Interim assurance regarding compliance are in process.

## **3.0 PERIODS OF INCREASED INCIDENCE/OUTBREAKS**

Quarter 1 saw 12 COVID outbreaks. This was a reduction from 17 outbreaks reported in Q4 of 23/24. The most common issues identified during the outbreak management are patients who are asymptomatic, intentionally unscreened patients creating contacts, who then tested positive and delayed isolation, due to the lack of side room availability.

There was one confirmed outbreak of C. diff on ward 28 at RSH, 4 patients were involved, with two cases had the same typing, demonstrating transmission in the ward environment. Learning identified included lack of hand hygiene for patients, contaminated sanitary equipment and overuse of gloves. This was supported by focused education on the ward to staff from the IPC nurses.

## **4.0 INCIDENTS RELATED TO INFECTION PREVENTION & CONTROL**

There were 3 MRSA bacteraemia's in Quarter 1 (see section 2.1).

## **5.0 IPC INITIATIVES**

**Quality Ward Walks (QWWs):** The methodology in undertaking Quality Ward Walk has changed in quarter 1 to Matrons completing the tool. In Q1, 45 QWWs were conducted in response to Covid-19 outbreaks and five for a CDI outbreak. Common concerns identified included incomplete ventilation and cleaning checklists, poor hand hygiene, improper PPE use, and cleanliness issues with equipment and sanitary facilities. The approach has fostered engagement, ownership and improvements.

### **After action review form for Cdiff infection (CDI)**

The "After Action Review" (AAR) form was introduced in response to repetitive findings in C. diff reviews. This was shorter, more adaptable form streamlines information Q2 will see version 2 trialled.

## **6.0 RISKS AND ACTIONS**

The IPC Risk Register, overseen by the Director of Nursing, is updated monthly and currently lists nine active risks. Of these, two are new: the risk of pertussis transmission (Risk 1040) and the loss of the MRSA screening compliance report (Risk 1070). Three risks are rated as "Extreme," including decontamination assurance, lack of isolation facilities, and the absence of a deep clean program. Four risks are rated "High," covering increased HCAs, lack of negative pressure isolation, measles transmission risk, and low staffing in the IPC team.

## **7.0 IPC BOARD ASSURANCE FRAMEWORK**

The Infection Prevention and Control Board Assurance Framework had an update published at the end of March 2024. The 10 domains remain, with a total of 54 lines of enquiry. This is reviewed regularly and reported to the Trust Infection Prevention and Control Operational Group and Assurance Committee on a quarterly basis. The BAF has a total of 54 Key Lines of Enquiry. 41 of which are rated as Green, 13 are rated as Amber, and 0 rated as Red.

## **8.0 HEALTH AND SOCIAL CARE ACT COMPLIANCE UPDATE**

The Health and Social Care Act (previously known as Hygiene Code) is reviewed quarterly by the IPC team and presented at the IPC Operational Group. Following the full review, the Trust is currently 97% compliant, being RAG rated 'Green' for 248 elements, 'Amber' for 19 and RAG rated 'Red' for 1.

The Trust self-assessment compliance against each of the 10 domains and the current gaps are shown in criteria 2 and 3 (see appendix 10):

## **9.0 CONCLUSION**

This IPC report has provided a summary of the performance in relation to the key performance indicators for IPC in Quarter 1 of 2024/25.