Infection Prevention & Control Annual Report 2023/2024

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Contents

1. Introduction

The purpose of this report is to inform patients, public, staff, the Trust Board of Directors, Council of Governors of the infection prevention and control work undertaken in 2023/24 and provide assurance that the Trust remains compliant with the Health and Social Care Act 2008. In addition, it provides assurance in respect to Code of Practice on the prevention and control of infections and related guidance from national infection prevention and control manual for England 2022 (NIPCM). It covers management arrangements, the position of infection prevention and control within Royal Papworth NHS Foundation Trust (hereafter referred to as 'RPH'), outcomes and progress against performance targets.

All NHS organisations must ensure that they have effective systems in place to control healthcare associated infections in accordance with the Health and Social Care Act 2008 (Appendix 1)

RPH has a pro-active infection prevention and control team that has the appropriate expertise and competence on the actions necessary to deliver and maintain patient safety. Equally, it is recognised that infection prevention and control is the responsibility of every member of staff and must remain a high priority for all to ensure the best outcome for patients.

RPH complies with the "Saving Lives" programme. High impact interventions (HII) were originally published in 2005 as part of 'Saving Lives' initiatives. Since then, the tools have been updated in 2007, 2010 and 2017. The latest review was undertaken by a working party commissioned by the Infection Prevention Society (IPS) in 2017 in association with NHS Improvement. The infection prevention and control audit and surveillance programme incorporate some of this guidance and along with other audits, allows constant monitoring of all infection prevention and control policies and procedures.

In February 2016, the National Institute for Health and Care Excellence (NICE) published Quality Standard 113 which covers organisational factors in preventing and controlling healthcare-associated infections in hospital settings.

The annual DIPC report is aligned to the ten compliance criteria as outlined in the Health and Social care act, Code of Practice on the prevention and control of infections and related guidance (Appendix 1).

The report aims to reassure the public that the prevention of transmission of infection is given the highest priority at RPH.

2. Executive Summary- Overview of Infection Control Activities within the Trust

The Director of Infection Prevention and Control (DIPC) Annual Report reports on infection prevention and control activities within Royal Papworth Hospital NHS Foundation Trust (RPH) from April 2023 to March 2024.

RPH continues to take part in mandatory surveillance of Methicillin Resistant Staphylococcus aureus (MRSA) bacteraemia, Methicillin-sensitive Staphylococcus aureus (MSSA) bacteraemia, Escherichia.coli (E. coli) bacteraemia and Clostridioides difficile (C.difficille) infection via the national UK Health Safety Agency,(UKHSA) healthcare associated infections Data Capture System (HCAI DCS). In addition, mandatory reporting of Carbapenemase-Producing Enterobacterales (CPE) was introduced in 2016/17 and

Pseudomonas aeruginosa (P. aeruginosa) and Klebsiella species (Kleb sp.) was introduced in 2017 which is included in this report.

- Royal Papworth Hospital has reported two MRSA bacteraemia for 2023/24 which is one more than the previous year.

- There has been a reduction in reported MSSA acquisitions (n=8) from the previous year which was 19.

- C.difficile reporting was above the threshold for 2023/24 at 17 cases, (threshold of 12). It's acknowledged that there has been a rise in C.diff cases nationally and this is also reflected in the increased number of cases reported within the ICB and regionally

- The Trust reported a total of 11 cases of E.Coli bacteraemia for 2023/24, which was an increase compared to last year which was 9.

- In 2023/24 the rate of surgical site infection (for patients who underwent coronary artery bypass grafts) was 8.3% (69 infections out of 831 surgeries) and for valve surgery 3% (16 infections out of 534 operations). This remains above the UKHSA average of 2.7%.

- Review and gap analysis against the Hygiene code (Health and Social Care Act 2008) and Board Assurance Framework document (NHSE) highlighted areas of improvement to gain assurance particularly in the areas of soft services with embedding the national cleaning standards 2021 and Health Technical Memorandum ventilation standards. A ventilation committee has been established which is providing assurance reporting to the ICPPC committee.

- In 2023/24 there were two positive M abscessus samples which were related to the RPH identified outbreak strain however further review has shown that there may have been a lab error. Neither patient have displayed signs of infection.

- There was one instance where contact tracing and screening was required for tuberculosis. There were no positive cases identified on screening.

- RPH had a number of IPC external peer reviews which were welcomed in 2023/24. In June 2023 we welcomed NHSE, ICB and our regional IPC lead, to support a peer review of our surgical patient pathway. This was to support our internal review of surgical site infections..

- In September 2023 a team from RPH visited Liverpool Heart and Chest Hospital, where learning was shared between both teams.

3. Description of Infection Control Arrangements

3.1. Corporate Responsibility

The Chief Nurse has lead responsibility within the Trust for Infection Prevention and Control and reports to the Chief Executive and the Board of Directors. This is in accordance with theHealth and Social Care Act (2008) updated in this report in line with revised guidance issued July 2015 and 2022.

The Executive Directors engage with patient environment rounds which include Infection Prevention and Control compliance. The Medical Director and the Heads of Clinical Governance and Risk Management, through their respective roles, also exert their influence at a corporate level in areas that have direct impact on infection prevention and control. Infection prevention and control is part of the Matron role at RPH and Matrons play a key role in auditing, monitoring, reporting on compliance and following up actions with IPC standards and practises.

3.2. Infection Prevention and Control Team

Specialist advice is provided to clinicians throughout the hospital by the infection prevention and control team. A Consultant Microbiologist is the designated Infection Prevention and Control Doctor (IPCD), with the weekly allocation of 4.7 programmed activities (18 hours per week for 42 weeks of the year) of infection control doctor time. Cover for leave of absence is not included but out of hours cover is provided by the Consultant microbiology team. Support for virology is provided through Cambridge University Hospitals NHS Trust.

The specialist infection, prevention and control nursing team provide education, support, and advice to all Trust staff with regard to infection prevention and control matters and liaise regularly with patients and relatives to provide information on alert organisms, offering advice and reassurance when required.

The team liaise with the multidisciplinary teams managers clinical governance, and risk management providing specialist input where required. The remit of the team includes:

- To have policies, procedures and guidelines for the prevention, management, and control of infection
- To communicate information relating to communicable disease to all relevant staff.
- To ensure that training in the principles of infection control is accurate and appropriate to the relevant staff groups.
- To work with other clinicians to improve audit and surveillance and to strengthen prevention and control of infection.
- To provide appropriate infection control advice to key RPH committees, taking national guidance and policy into account.
- To share information with relevant stakeholders within the NHS when transferring the care of patients to other healthcare settings.
- To ensure high standards of infection control are maintained through a programme of audits and surveillance.
- To be key experts and part of the relevant stakeholder group to maintain safety.

Full details of the infection prevention and control team are provided in the organisation chart provided in Appendix 2. A full working plan for IPC team is reviewed annually.

3.3. Infection Prevention and Control Committee Structure and Accountability

The Infection Control and Pre and Perioperative Care (ICPPC) Committee is the main forum for gaining assurance and discussion concerning changes to policy or practice relating to infection prevention and control. The membership of the Committee is multi-disciplinary and includes representation from all clinical divisions, estates and facilities, decontamination, clinical audit, antimicrobial pharmacist, clinical governance and occupation health service. The Committee is chaired by the Director of Infection Prevention and Control (DIPC) and meets every 8 weeks. Assurance and items for escalation are presented to the Quality and Risk Management Group (QRMG), which is then shared to Quality and Risk Committee, (subcommittee of the Board of Directors). In 2023/2024 additional Surgical Site stakeholder group meetings were held fortnightly to support the SSI improvement work.

Terms of Reference for the ICPPC were established on recommendations for the composition and conduct of infection control committees contained in Department of Health in December 2003, of the Chief Medical Officer's strategy for infection control (Winning Ways: working together to reduce healthcare associated infection).
Additionally, clinical IPC link roles and IPC champions have been identified in clinical and non-clinical areas and form a "Infection Control Link Group". This group acts as a forum for education and discussion and helps with embedding best practise across RPH.
IPC masterclasses are shared to all newly appointed Matrons on induction as well as regular attendance at the Matron monthly meetings. IPC study days have taken place throughout 2023/24, as well as the development of the monthly IPC newsletter for shared learning across the Trust.

3.4. Infection Control Team on Committees at Royal Papworth Hospital

The IPC team provide subject matter expert advice and guidance at RPH internal and external meetings and committees as required.

3.5. Infection Control Team Representation on External Committees

- East of England Regional Microbiology Development Group
- East of England Infection Prevention Society Branch Meetings
- Network meetings with the Integrated Care board and services including regional hospital.
- DIPC attends the integrated care board (ICB) IPC Board

3.6. Assurance, Internal, and External Inspections

The assurance process includes internal and external measures. Internally, the accountability exercised via the committee structure described above ensures that there is internal scrutiny of compliance with national standards and local policies and guidelines. Furthermore, external assessments are also used. These include the "Controls Assurance" measures for infection control and decontamination standards, International Standards for Organisation Care Quality Commission standards and the Patient-led assessments of the care environment (PLACE), plus a Health and Social Care act 2008, review.

All controlled assurance and progress in these areas during 2023/24 are summarised below:

Standards for Decontamination (Criterion 1,2,9)
Sterile Services is subcontracted and provided by Nuffield Health. Nuffield Health is independently audited and appropriately accredited and provides assurance reports to RPH to demonstrate that the requirements of disinfection, assembly, packing, moist heat and gas plasma sterilisation of theatre trays and procedure packs and supplementary instruments in accordance with ISO 13485:2003 and ISO 9001:2008 are met. For moist heat and gas plasma sterilisation of theatre trays, procedure packs and supplementary instruments in accordance with Medical Devices Directive 93/42/EEC Annex V, Article 12 (Sterility Aspects Only). The Trust appointed a decontamination lead, to monitor and manage sterile service and manage endoscopy within RPH. A decontamination sub-committee working group has been developed and a monthly assurance report is presented to the ICPPC committee. Work continued throughout 2023/24 to develop relations with our sterile service contractors and in October 2023 RPH started the process of tendering the sterile services and endoscope service, for a decision to be agreed. In January STERRIS was awarded a 3 year contract to support both decontamination of sterile instruments and endoscope devices. This contract would be to start in April 2024.

Care Quality Commission Standards (Outcome 8)
RPH is registered with the CQC and, in accordance with this regulation, monitors compliance against the ten criteria as outlined in the Hygiene Code (Health and Social Care Act 2008 doc) A full gap analysis (Appendix 3) against all ten criteria was completed and further reviewed quarterly through-out 2023/24. CQC fundamental regulation15 - Premises & Equipment (including cleanliness & infection Control) is reviewed annually under a mock review, which is presented to the fundamental of care group for assurance and shared learning.

UKHSA Data Capture Mandatory reporting (Criterion 1)
The Infection Control Doctor is responsible for mandatory reporting of alert organisms to the UKHSA Data Capture website. The monthly alert organism report is shared through the ICPPC committee and governance structures through to Board of Directors.

Patient Led Assessments of the Care Environment (PLACE) Programme:
PLACE Audit Results table inspection (Criterion 1 & 2)
All healthcare providers are required to take part in the national Patient-Led Assessment of the Care Environment (PLACE) annual inspections. PLACE is a national self-assessment tool designed to measure standards of:

- Cleanliness,
- Food comprising Organisation Food and Ward Food
- Privacy, Dignity & Wellbeing,
- Building Condition, appearance & maintenance,
- Dementia friendly environment
- Disability friendly environment

The Health & Social Care Information Centre (HSCIC) provide comprehensive guidance on the organisation and conduct of assessments and separate guidance documents for staff and patient assessors. PLACE assessments are carried out by internal and external assessors within inpatient facilities and the surrounding patient environment. Assessors include Governors, Volunteers, Trust members and representatives from the Trust's facilities contractors.

The outcome for 2023/24 shows that while we have a diverse spread of inpatient environments, the quality of the cleanliness and condition, appearance and maintenance

remain at a high standard across the whole Trust. This is reflected in the Trust score being above the national average in these categories.

The latest published assessment was undertaken in November 2023 results are available in appendix 4 or at: Patient-Led Assessments of the Care Environment (PLACE), 2023 - England - NHS England Digital

3.7. DIPC Reports to Board of Directors and Quality and Risk Management Group

A monthly IPC report forms part of the patient safety agenda at Quality and Risk Management Group (QRMG) and reports on mandatory monitored healthcare associated infections (HCAIs) such as C. difficile and MRSA, as well as other healthcare associated infections. The report also highlights adverse infection prevention and control issues and incidents or concerns in clinical practice. QRMG provides an assurance report and items for escalation to Quality and Risk and through to Board of Directors as required.

3.8. Infection Control Reports and Programme for 2022/23

Work undertaken by the Infection Prevention and Control Team during 2023/24 covers the following areas:

- Compliance with the Health and Social Care Act 2008 updated in this report in line with revised guidance issued July 2015.
- Infection Control, pre and perioperative care committee
- Link Practitioner Network and monthly IPC newsletters
- Development and maintenance of policies and procedures
- Audit and Surveillance monitoring and reporting
- Education including IPC study days and masterclasses for Matrons.
- Compliance with Department of Health initiatives – High Impact Interventions / WHO 5 Moments for hand hygiene
- Outbreak and incident management
- HII monitoring is reported in the Royal Papworth integrated performance report.
- Leading a refreshed fit testing service to ensure staff are protected from airborne infection and ongoing service as supported by Health & Safety Agency (HSA).
- Working in collaboration with the SSI stakeholder group.
- Providing IPC expertise in essential safety groups.
- Develop decontamination subgroup committee and provide IPC expertise plus support the decontamination lead.

3.9. High Impact Interventions

At RPH the designated Infection Prevention and Control link practitioners carry out monthly High Impact Intervention (HII) audits. The HIIs are an evidence-based approach to clinical procedures and care processes. The appropriate use of HII audits help to identify gaps in practise that pose a risk to hospital acquired infection and identify areas for improvement. In 2023-2024 IPC review all clinical audits and some HII were removed from the audit programme. The decision was made to continue with, HII5 Ventilation-association Pneumonia, HII8 Cleaning and Decontamination and continue with the monthly audit of aseptic non-touch technique (ANTT) which was introduced as part of RPH's approach to reduce surgical site infections. In 2023/24 the full audit cycle and action plan programme has continued which encourages collaborative working and clinical engagement. If audits fall below the 95% standard for HII audit, evidence of an improvement plan must be provided. This is overseen by the ICPPC Committee. RPH achieved a cumulative total of 97% for HH audits and 93% for all HII audits. There was encouragement for peer review in most clinical areas for 2023-2024 which showed a slight decline in IPC compliance within the audit. This

recognition highlighted which areas may have needed education on auditing technique and the audit cycle.

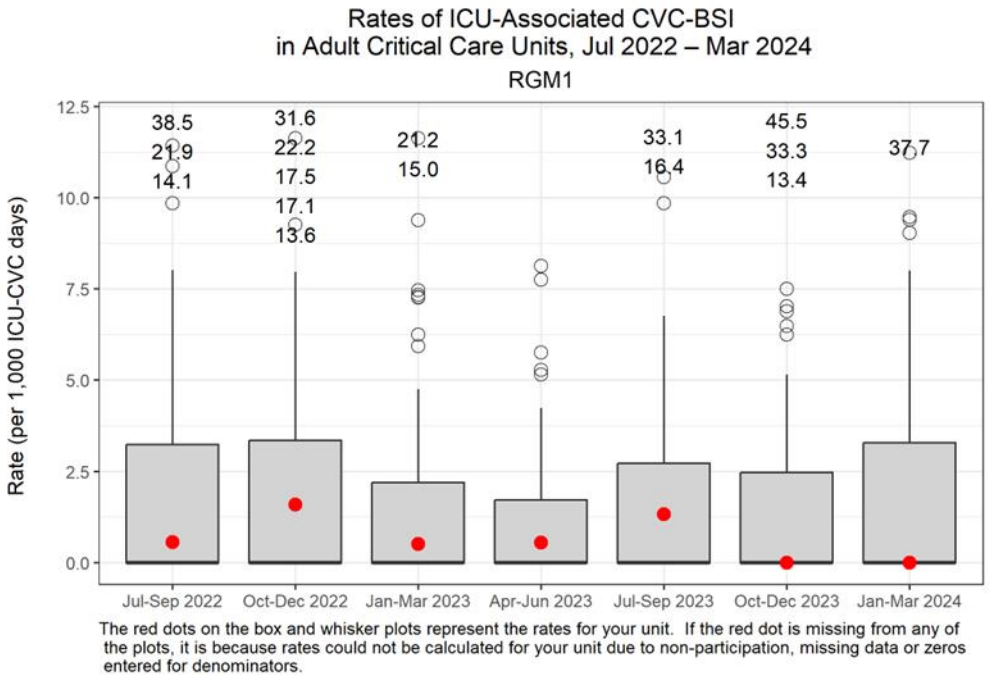
4. HCAI Statistics

4.1. Infection Control in Critical Care Improvement Programme (ICCQIP)

The ICCQIP board was set up in 2016 to address the concerns of hospital-associated Infections (HAI) in intensive care units (ICU) around central venous catheter care in England, following on from the publication of the successful 'Matching Michigan' study.

The ICU surveillance programme aims to characterise and monitor central venous catheter (CVC) associated blood stream infections to identify concerns and support actions to reduce the infection rates. Data is collected and analysed on a quarterly basis and unit level reports are generated and sent to respective units.

The results for 2023/24 are presented in the form of a graph as below:



RPH is indicated by the red dot and indicates the rate of ICU-associated CVC-BSI is within the interquartile range in all periods which shows low rates of ICU/CVC/BSI. 2023/24 is again low, achieving zero CVC-BSI in the last quarter. The quarterly report is discussed with the critical care multidisciplinary team and monitored by the ICPPC committee.

4.2. Mandatory Reports

4.2.1. MRSA

MRSA bacteraemia figures for the past 10 complete years are represented in the table 1 below.

Table 1- Papworth Annual MRSA bacteraemia rates

01.04.14 to 31.03.15	01.04.15 to 31.03.16	01.04.16 to 31.03.17	01.04/17 to 31.03.18	01.04.18 to 31.03.19	01.04.19 to 31.03.20	01.04.20 to 31.03.21	01.04.2021 to 31.03.2022	01.04.2022 to 31.03.2023	01.04.2023 to 31.03.2024
1	0	0	5 (3 on trajectory)	2 (1 on trajectory)	0	2(1 on trajectory)	0	1 (on trajectory)	2 (on trajectory)

The threshold for MRSA bacteraemia's set for Royal Papworth for 2023/24 by UKHSA was zero. There were 2 MRSA bacteraemias in this period. A full post infection review was completed on both, and actions/lessons learnt were shared.

The introduction of universal MRSA screening allows early identification and treatment of patients colonised with MRSA which considerably reduced infection rates. Compliance with MRSA screening in 2023/24 was 94% which has reduced from 97% in 2022/23. Due to reduced compliance in 2023/24 the IPC team will reviewed MRSA screening audit quarterly for 2024/25 and increase awareness to the clinical teams.

4.2.2. C.difficile

C. difficile figures for the last seven years are represented in table 2 below. Following updated guidance from UKHSA all C. difficile cases that occur two or more days into the patients' admission are counted towards RPH annual threshold, regardless of whether the scrutiny panel has found any learning outcomes, and it was unavoidable. In 2023-2024 we changed the way we review C.diff cases. Rather than completing a full root cause analysis (RCA) and attending a scrutiny panel meetings for each case to identify any lessons learnt, all C.diff cases are reviewed by completing a mini-RCA by the IPC team and escalate any concerns to the clinical teams If a cluster or outbreak, are observed a full RCA and a post infection review meeting (PIR) is held.

Table 2- C.difficile cases 2017 to 2024

	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
C. difficile >65 yrs.	4	6	6	5	8	2	9
C. difficile < 65 yrs.	3	5	5	3	4	5	10
Total	7 (3 attributable)	11 (2 attributable)	11	8	12	7	19 (17 attributable)

The ceiling threshold set for Royal Papworth by the UKHSA for 2023/24 was 7 cases. RPH were above the threshold set by UKHSA and full RCA were completed. All cases reviewed were identified as complex patients with multiple predisposing factors meaning they were more suspectable to acquiring C difficile. To support the drive to reduce C.diff cases a deep dive into themes of all cases that occurred in 2023-24, in the aim to identify any key learning and themes that would support infection prevention and improve compliance of the national guidance. This will be monitored through the ICPPC committee

4.2.3. MSSA bacteraemia

Reporting of Methicillin Sensitive Staphylococcus aureus (MSSA) bacteraemia to the UKHSA Health through the MESS system has been compulsory since January 2011. There is no threshold set by external regulators for MSSA. The numbers in Table 3 below include cases where the blood cultures were taken within 48 hours of admission to the hospital which could indicate community acquired infection as well as hospital acquired.

Table 3- Incidence of MSSA bacteraemia

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Methicillin sensitive *Staphylcoccus aureus* bacteraemias (MSSA)	9	16	21	17	14	22	9	16	17	12	19	8

MSSA was considerably below 2023/24 and were individual cases not linked to time and place.

4.2.4. E.coli bacteraemia

Reporting of E. coli bacteraemia to the Department of Health through the HCAI DCS system has been compulsory since June 2011. These infections are reported to the Infection Prevention and Control Committee. There is no threshold set by external regulators for these infections at present. Reporting of klebsiella and P. aeruginosa bacteraemia's have become mandatory since 2017, but also no threshold set. These are monitored through ICPPCC.

Table 4- E.coli

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
***E. coli* Bacteremia's**	11	12	11	9	9	14	9	9	11
***Klebsiella* sp. Bacteremia**			7	12	13	28	13	15	11
***P. aeruginosa* Bacteremia**			3	6	4	9	5	4	3

4.3. Other Surveillance Reports

4.3.1. Glycopeptide resistant enterococci/Vancomycin resistant enterococci/carbapenemase producing enterobacteriaceae (GRE/VRE/CPE) and ESBL bacteraemia

VRE and ESBL bacteremia's and CPE are reported to the Infection Prevention and Control Committee and to UKHSA quarterly. There are no ceilings set by external regulators for this healthcare associated infections. There was an increase in VRE bacteraemias compared to the previous year. ESBL and CPE are low rates. This will be closely monitored for 2024/25.

Table 5- GRE/VRE and ESBL

	2014/15	2015/6	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/2024
Glycopeptide (or Vancomycin)-Resistant *Enterococcus* (GRE/VRE) bacteremia's	4	3	8	11	8	3	14	12	2	4
Extended spectrum B-lactamase producers (ESBL) bacteremia's	0	3	5	3	1	2	6	1	3	2
Carbapenemase-producing *Enterobacteriaceae* (CPE)			1	5	5	6	7	1	2	3

4.4. Mycobacterium abscesses

In 2019, following routine testing, an outbreak was declared and an investigation was commissioned following identification of *M. abscessus* infection which was shown to be linked to the water supply at RPH. M abscessus is a rare infection which can affect people with specific underlying respiratory conditions or those who are immunosuppressed.

Since implementing our stringent additional water safety measures, we have significantly reduced the number of patients acquiring M abcessus at the Trust. In 2023/24, 2 new cases were identified but the clinicians felt the patient did not follow the symptomatic pathway and, on further investigation, the samples were identified as a potential risk of contamination from the Laboratory.

The M abscessus steering group was established in January 2021, continued in 2023/2024 involving Estates and Facilities, Clinical and Research, and Governance and Communication and this reported to the executive oversight committee.

4.5. Surgical Site Surveillance

Surgical Site Surveillance at Royal Papworth Hospital (RPH) refers to of identifying cardiothoracic surgery patients that develop a surgical wound infection. Historically we have only monitored Coronary Artery Bypass Graft (CABG) and valve surgeries, however in 2023-2024 we also introduced surveillance for Pulmonary Thromboendarterectomy (PTE) surgeries, heart and lung transplantations and other cardiac surgeries that require a sternotomy wound.

Surgical site infections (SSI), are declared when certain criteria set by the UK Health Security Agency (UKHSA) are met, and at RPH CABG infection rates to UKHSA quarterly. Other surgical site infection data is used for internal monitoring only. The aim for 2024 is to report non-CABG infection rates (note this will not include PTEs and transplants as UKHSA do not report these categories).

As part of the CABG reporting, SSI patients are grouped in terms of how they are identified, as follows:

- Inpatient (during current surgical admission) or readmission due to wound infection
- Other post discharge follow-up e.g., outpatients clinic/ community team
- Or patient self-reported

From this data we can compare our hospital rates to all other hospitals that submit their CABG SSI rates by gaining a benchmark figure. However, it should be noted that this benchmark figure consists only of those identified in the inpatient or readmission group. As per the UKHSA, “the benchmark comprises inpatient and readmission data only, as it is mandatory for all hospitals to use these two detection methods.
The Surgical Site Surveillance programme monitors patients for one year post surgery, meaning that the identification of an SSIs can still occur within that time frame post following surgery. Therefore, figures are constantly updated and subject change.

Surgical Sites Infection rates 2023-2024

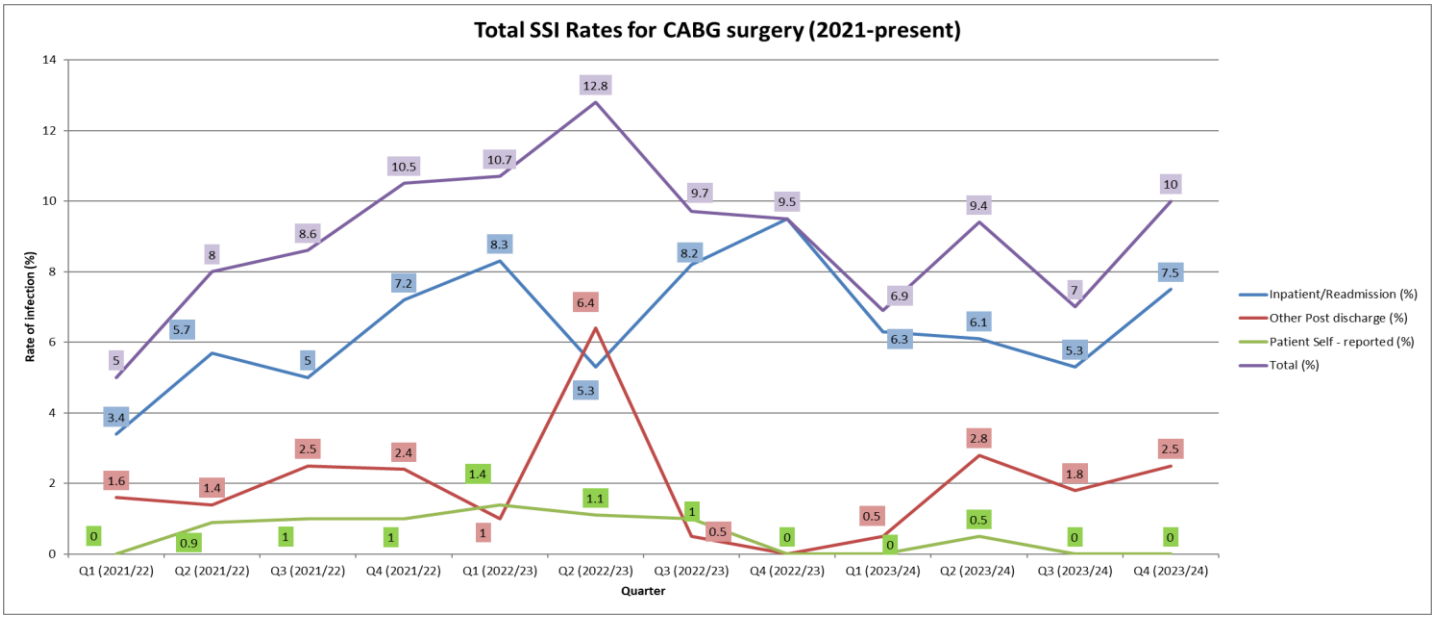
Our SSI rates are broken down into categories for reporting to UKHSA. Table 6 shows the quarterly CABG SSI rates . The overall infection rate has ranged from 6.9% - 10% throughout 2023-24. Most of the infections are identified when patients are inpatients post procedure or readmitted with a wound complication. The other categories however do contribute significantly to the overall CABG SSI rate.

Table 6 –CABG SSI Rates 2023-2024 *(No. of patients and infection rate %)*

	Q1 (2023/24)	Q2 (2023/24)	Q3 (2023/24)	Q4 (2023/24)
Inpatient/Readmission	12 (6.3%)	13 (6.1%)	12 (5.3%)	15 (7.5%)
Post Discharge	1 (0.5%)	6 (2.8%)	4 (1.8%)	5 (2.5%)
Self-Reported	0 (0%)	1 (0.5%)	0 (0%)	0 (0%)
TOTAL	13 (6.9%)	20 (9.4%)	16 (7%)	20 (10%)

Graph 8 shows the breakdown of CABG SSI category reporting from 2021 – 2024. As can be seen, the overall infection rates are slightly lower than 2022-2023, however quarter 4 (January - March 2024) saw a peak at 10%. Although these rates have decreased slightly in comparison to 2022-2023, the UKHSA national benchmark for this category has remained at 2.6-2.7% throughout the year.

Graph 8- Total SSI rates for CABG surgery 2021 – present



SSI Stakeholder Group 2023-2024

The SSI stakeholder group was originally established in 2019 to deliberate over the rise in deep wound infection rates following the move to the new Royal Papworth Hospital. The stakeholder group gathers representatives from the multi-disciplinary team involved in the patient's surgical pathway.

Following on from the actions commenced in 2022, May 2023 saw the introduction of five task and finish groups implemented by clinical governance in response to the continued high rate of SSIs. The five groups are as follows:

- **Clinical Practice Group**: Focuses on reviewing and scrutinising all aspects of clinical care; make recommendations for change in the clinical management of patients; ensure there is sufficient focus on risk assessment; review the outcomes and recommendations from clinical reviews of SSIs; and provide evidence-based advice and guidance based on the latest research for the management of SSIs.

- **Communications and Engagement:** Supports the development and delivery of all external communication to stakeholders, media and public with SSI; support clinical teams in critically appraising all patient communication in relation to SSI i.e. patient letters, leaflets, and consent information; and providing updated staff communication regarding SSI i.e. frequently asked questions and staff messages.

- **Staff Engagement:** To support clinical teams to consider the impact of human factors and behaviour and develop staff awareness and engagement in activities related to SSI such as uniform, clinical standards and environment; to support a quality improvement culture and consistent application of required practice standards.

- **Environmental and Decontamination:** To maintain infection prevention and control (IPC) standards; to provide expertise and guidance on IPC measures in relation to SSI; to monitor and oversee ventilation safety, decontamination subcommittee, estates meetings with theatres, CCA and level 5, cleaning standards of environment and medical devices, and water safety; and to provide expertise for training and information in relation to the environment including cleaning of equipment.

- **SSI Patient Scrutiny Panel:** To ensure root cause analyses (RCAs) are completed for all patients with a deep or organ space SSI; to identify any omissions in care and review practice; to present all RCAs to the surgical mortality and morbidity (M&M) meeting to ensure multi-professional review; to identify any harm/risk and escalate a summary of harm reviews to the Safety Incident Executive Review Panel (SIERP) if required.

Each group has its own actions aimed at reducing SSIs as well as communicating the correct information to staff and patients. Each group reports directly to the SSI Stakeholder Group which is the senior decision-making group for the organisation regarding the current, ongoing, and future management of SSIs.

The task and finish groups have continued into 2024, following the reporting structure.

Royal Papworth Hospital has also sought external assistance in our surgical site infection rates, including a visit from NHS England who gave some observations and informal recommendations to assist our work in reducing SSIs. This included recommendations around adopting EVH as the routine method of vein harvesting, pre-op optimisation of HbA1c and weight loss management in diabetic patients, and the number of staff required in theatres being risk assessed. They also gave recommendations regarding the environment such as a process to ensure cleaning standards are met, ventilation review by an independent authorised engineer and observations for best practice within the building design.

Root Cause Analyses (RCAs) of deep and organ space SSIs

The SSI and wound care team have completed 33 full RCAs of all deep and organ space infections throughout 2023-2024 which have been reviewed at the scrutiny panel weekly. The RCAs look at the patients whole surgical pathway, to identify any factors that could be causative to the development of the SSI. Each RCA has been discussed at the meeting and sent to the individual consultant and surgical team involved in the patient's operation for comments. All findings have been acted upon in clinical practice.

Wound Care/Tissue Viability Team 2023-2024

The Wound Care team have been actively involved in supporting SSI patients through inpatient care on the wards as well as in outpatients wound clinic, working closely with parent surgical teams.

2023/2024 has shown that SSI rates at RPH remain elevated but are reducing and it remains a high priority within the trust. Additional surgical site surveillance that commenced this year has enabled us to monitor all cardiac surgeries and identify any trends and themes that may also occur in these groups.

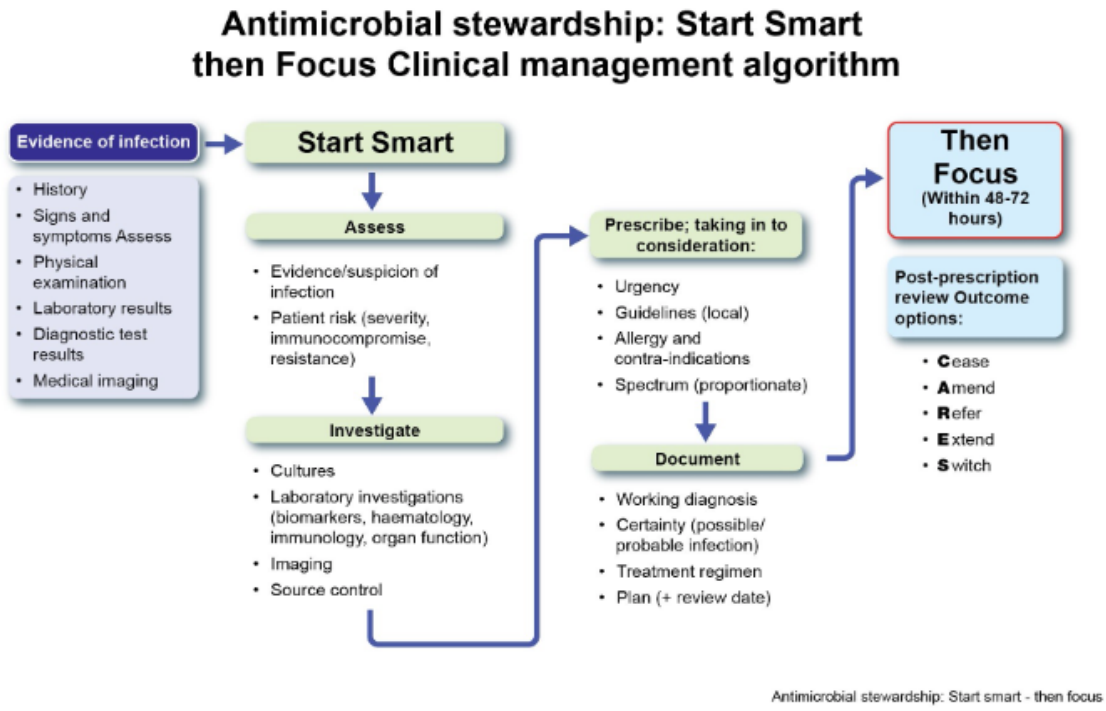
The task and finish groups continue to progress with the actions set and report to the SSI stakeholder group fortnightly. The established RCA process for all deep and organ space infections continues to enable a thorough review of any potential causes and practice is changed from lessons learned.

4.6. Antimicrobial Stewardship

Antimicrobial Stewardship (AMS) 2023 – 2024

The Department of Health updated its "Start smart then focus" (SSTF) antimicrobial stewardship toolkit in September 2023 after considering recommendations from the Chief Medical Officer (CMO), the UK 5-year antimicrobial resistance national action plan 2019 to 2024, a 2017 Cochrane Review, the 2022 ESPAUR report, and the antimicrobial stewardship (AMS) guideline produced by the National Institute for Health and Care Excellence (NICE). The AMS Team have subsequently adopted this tool kit into its antimicrobial stewardship guidelines as the updated toolkit provides an outline of evidence-based AMS in inpatient care settings and helps Trusts demonstrate adherence to the Health and Social Care Act 2008: Code of Practice. Within the toolkit a greater emphasis is made on a thorough patient assessment, obtaining all appropriate samples prior to initiating therapy, prescribing promptly in accordance with local guidelines and complete documentation.

Figure 1: AMS clinical management algorithm



Antimicrobial stewardship: Start smart - then focus

The 5 antimicrobial review outcomes **(CARES)** are to:

- **Cease** antimicrobial prescription if there is no evidence of infection – to reduce the risk of harm from antimicrobial treatment in the absence of benefit.
- **Amend antimicrobials** – ideally to a narrower spectrum agent – or broader if required – to ensure that treatment is effective and proportionate.
- **Refer to non-ward based antimicrobial therapy services** (such as 'complex outpatient antimicrobial therapy' – COPAT, or virtual wards) for appropriate patients if available – to facilitate timely discharge from hospital and reduce risk of acquisition of healthcare-associated infection.
- **Extend** antimicrobial prescription and document next review date or stop date – to avoid inappropriately prolonged treatment.

- **Switch** antimicrobials from intravenous to oral according to national intravenous to oral switch (IVOS) criteria – to facilitate timely discharge from hospital and reduce the risk of harm from intravenous administration.

In 2023/24 the AMS Team have embraced and promoted these principles to all the clinical teams. We participate in weekly multidisciplinary ward rounds (critical care, surgical, transplant and respiratory medicine), provide advice to clinical staff, write and produce guidelines on the trust intranet and on the MicroGuide® app, deliver bite-sized educational session to practitioners and continue to audit our practice and guidelines.

Antimicrobial usage

In 2023/24, Royal Papworth Hospital (RPH) **ACHIEVED the NHS Standard Contract antibiotic consumption reduction requirement of reducing our "Watch" and "Reserve" antibiotic use by greater than 10% compared to 2017 baseline.** Our published reduction is -19.1% up to Q3 2023/24 (with our internal data (yet to be verified officially) demonstrating a -25.5% reduction in Q4 2023/24).
RPH is one of only two trusts in the East of England region to meet this target and one of 30 trusts in England, to do so.

CQUIN activity

The AMS team ensured that Royal Papworth Hospital **MET** the **CQUIN03: Prompt switching of intravenous (IV) to oral antibiotic target**. Every quarter, the AMS team randomly reviewed 100 patients on IV antibiotic therapy alongside the national antimicrobial intravenous-to-oral-switch criteria. The IVOS CQUIN target required that fewer than 40% of patients (each quarter) should be receiving IV antibiotics after they had met the criteria to have been switched to oral antibiotics. Overall, for the FY 2023/24 RPH achieved 25.5% and MET the IVOS CQUIN parameters.

UKHSA Healthcare Associated Infection (HCAI) and Antimicrobial Use (AMU) Point Prevalence Survey (PPS)

RPH participated in the **UKHSA Healthcare Associated Infection (HCAI) and Antimicrobial Use (AMU) Point Prevalence Survey (PPS)**. This was a large multidisciplinary project involving Consultant Microbiologists, AMS Pharmacists and Technicians and the Infection Control Team. The survey ran for a period of 6 weeks between September and November 2023. This PPS is the first of its kind since the SARS-CoV-2 pandemic and Brexit and the benefits of participating were to determine:

- Evidence on burden of disease and how it is changing over time (to understand demand for antimicrobials).
- Linking of HCAIs to antimicrobial exposure; linking of antimicrobials to diagnosis/indication
- Better data for paediatrics compared to DDDs.
- Benchmarking with peer group UK hospitals to understand quality of care locally and identify opportunities for improvement.
- Information to guide future case mix adjustment by comparing demand for antimicrobials by specialty.
- Helps establish post-COVID baseline.

We have received our preliminary data though the final national report has yet to be released. We hope to use the data to shape our AMS Strategy for 2024/25.

Global Antimicrobial Stewardship Accreditation Scheme (GAMSAS)

RPH has gained Level 2 accreditation to the British Society for Antimicrobial Chemotherapy (BSAC) Global Antimicrobial Stewardship Accreditation Scheme. The GAMSAS Standards have been developed based on

published international standards and checklists for AMS. They provide a points-based system to assess AMS holistically in any health economy and award accreditation relevant to the local context. A key feature is ongoing quality improvement activity to support robust and sustainable AMS programmes and spread of good practice. Good practice recommendations have been identified based on practice in centres with mature established AMS programmes. The AMS Team has benefited from this external review of our services and will use their constructive feedback to areas of need of improvement.

Table 9- Summary of Compliance with Sandards

Service area	Scores for each section	Total score	Codes of Standards not met	Suggested Accreditation level
National AMS	3/3, 2/2, 3/3, 2/2	10/10	Not applicable	Not applicable
Organization AMS	6/6, 4/4, 4/4, 4/4	18/18	Not applicable	3
Organization IPC and HAI surveillance	3/3, 1 /1, 1/1, 2/2	7/7	Not applicable	3
Organization lab service and AMR surveillance	1/2, 3/3, 0/1*, 2/2	6/8	Not applicable	2

Not applicable as off-site lab

The off-site lab used by RPH is in the process of attaining its national accreditation and until this is attained our AMS service will remain at level 2.

AMS Audits and Research

Audits carried out:

- Four rounds of pre-op prophylaxis audits
- Service evaluation on Ventilatory associated pneumonia
- Start Smart and Focus audit in the transplant team
- Reviewing the use of Imipenem/Relebactam/Cilastin for multi-drug resistant Pseudomonas spp. Presented as a poster at the Federation of Infection Societies (FIS) conference in Edinburgh 14-15 November 2023.

Research projects:

- UK Antimicrobial Register (UKAR) Study. The objective of this study is to determine, using real-world data, the effectiveness and safety of recently licensed newer antimicrobial agents (four of which we use at RPH).
- SHORTER study – a multi-centre ITU based study looking at whether shorter courses of antibiotics can be used in sepsis.
- NAAN study – a multi-centre study looking at penicillin de-labelling services and outcomes.

Educational activities:

- AMS teaching sessions with FY1,FY2 IMTs and ANPs
- Regional engagement with “shorter courses”, “penicillin delabelling” and use of Fluoroquinolones
- National teaching activities – HAP/VAP talk to national anaesthetic trainees.

4.7. Incidents and Outbreaks

Incident and outbreak investigations occurring in 2023/24 were managed and reported to the ICPPC throughout the year.

Influenza
The total number of flu cases within Royal Papworth were twenty-four cases with three that were hospital acquired. There were no influenza outbreaks for 2023/24.

Norovirus
Norovirus cases remained low with just one cases for 2023/2024 with no outbreaks or ward closures reported.

***Clostridioidies difficile* (*C. difficile*)**
There were no outbreak or cluster incidents relating to *Clostridioidies difficile* infection in 2023/24 and all C difficile cases which were hospital acquired were reviewed with lessoned learnt.

MRSA
There was two cases of MRSA bacteraemia which was hospital acquired in 2023/24. A post infection review was completed for both, and a meeting was held. All learning outcomes were identified, and action plan completed.

MSSA
There were much lower numbers of MSSA, and no outbreaks reported for 2023/24.

***Mycobacterium abscessus* (*M. abscessus*)**
In 2023/24 two new cases were identified which were related to the RPH outbreak water but on investigation it was found to be potential contaminated samples.

Mycobacterium tuberculosis (TB)
There had been 2 patients in 2023/24 who had a new diagnosis of TB and an investigation with contact tracing was implemented due to appropriate isolation not carried out. Assessment and review undertaken with no further actions needed.
Incident of a newly appointed staff member with a diagnosis of TB, was highlighted. An Incident Management team was convened and full contact screening was implemented. Risk assessment was completed, screening and advise was completed by the Occupation Health team. No cases of TB was identified through this screening group.

Vancomycin Resistant *Enterococcus* VRE and Extended Spectrum Beta-Lactamases (ESBL)
All positive clinical site samples are monitored to enable RPH to identify increases in these organisms and act accordingly. There were no incident or outbreak of VRE or ESBL.

Carbapenemase Producing *Enterobacteriacae* (CPE)
There has been no evidence of CPE transmission or outbreaks during 2023/24

COVID-19
There was a small increase in COVID-19 positive patients admitted in October to December 2023. However, none of these patients required critical care support and there was a reduction in the numbers of patients needing to come into hospital due to COVID-19 infection. The table 10 shows there were 14 nosocomial cases in 2023/24 periodically with a spike in October and December where more COVID-19 cases were identified within the trust. All nosocomial were fully investigated and monitored through the ICPPCC. There were no staff outbreaks relating to COVID 19. The national team ended the reporting system in 2023/24, meaning we no longer had to report all nosocomial investigation externally, however we did keep Integrated care board up to date.

Table 10- Nosocomial COVID cases

Month	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Year Total
New positive patient	8	1	6	3	1	6	12	7	18	9	9	1	79
Total new nosocomial	2	0	1	1	0	0	3	1	4	1	1	0	14

5. Environment

5.1. Cleaning Services

OCS provides cleaning services to Royal Papworth Hospital, through a PFI contract arrangement. This is monitored through the Trust Estates team performance monitoring forums and ICPPC committee and QC audits take place which are monitored with the oversight from the Matrons.

- Within each department/ward of the hospital there are *"commitment to cleaning"* boards that display the roles, responsibilities, and cleaning routines of that department; these also incorporate the required SLA for that specific department/ward
- As an output spec contract there are no specific staffing number requirements aligned to the cleaning contract, the service level that OCS are monitored against is the frequency of work/service specification outputs.
- The PFI contract is a self-monitoring contract which enables the contractor to take a lead in all cleaning audits. In addition to this we have organised joint audits that take place according to the 13-week schedule. In the event of an audit failing, OCS will rectify the failings immediately and the area will be audited again on completion.
- Any failures in cleaning audits are reported in the monthly performance report and managed through the PFI contractual management process.
- OCS & E&F are continuing to work to ensure sufficient staffing levels are maintained within the agreed contract.
- The Trust and OCS worked to implement the updated NHS cleaning standards 2021 in July 2023. This was delayed due to contract renegotiation with provider services and the benchmarking process.

5.2. Deep Cleaning Programme

The Trust continues to work closely with OCS to implement a robust deep cleaning programme in line with the PFI contract that is carried out through-out the year. The progress against this is reported back to the infection control committee group. The new NHS National Cleaning standards 2021 were reviewed in 2022, and RPH and OCS worked closely together to implement these standards in 2023. The periodic (deep) cleaning schedule of Theatre and Cath Lab complex was requested during the SSI review and is monitored through the ICPPC Committee.

5.3. Management Arrangements

OCS is overseen by the General Manager from Project Co, and the Director of Estates and Facilities and Operations/Commercial Managers from the Trust. The OCS PFI Director visits the site regularly. Together they oversee management of the cleaning contract. This management structure also supports the cleaning supervisors on a day-to-day basis.

5.4. Monitoring Arrangements

The contract is set up to be self-monitoring. OCS have implemented an new auditing system called Audim which uses the NHS 50 elements template to track and score audit scores to comply with the new national standards. Trust Estates have access to the system which allows transparency in the data. The employment of OCS supervisors alongside Trust Estates Monitoring Officers ensures consistent focus on both quality-of-service delivery and effective communication on monitoring results. The results of all cleans across the Trust

are sent to the Senior Nurses/Department Heads, and any discrepancies are discussed at the ICPPC. OCS utilise the National Standards for Cleanliness audit tools and follow the recommendations as laid down by this national body. Out of hours cleaning provision is available.

Quality controls (QC)s are undertaken as per schedule below, and QC teams consist of a matron or nursing representative, OCS and Estates and Facilities; all results are captured on the Audim system and are reported monthly.

Area	Frequency
FR1	**Weekly**
FR2	**Two-weekly**
FR4	**Quarterly**
FR6	**Annually**

*FR = Functional Risk

5.5. Linen Services

The linen service is provided by Elis via a shared service with Cambridge University Hospitals; their contract is for clean linen to be delivered to site daily consisting of the following: sheets, draw sheets, pillowcases, towels, blankets, scrubs, and patient gowns. These are stored in the linen room and dispatched to the wards by the porter team. Dirty linen is collected from the wards by porters and then collected by Elis for cleaning. The linen is cleaned in accordance with NHS standards, Trusts are invited to visit if they wish, and a team have previously been to review this service for assurance. The company are externally audited and have been accredited for their service. If there are any issue within this service RPH are alerted to this and action is taken immediately.

5.6. Water Safety

The Trust has a Water Safety Group, which reports to the Infection Prevention and Control Committee. The Water Safety Group meets regularly to review the water safety plan and report any issues relating to water systems relating to water health.

The Water Safety Group is the working group whose duties are to advise on and monitor the implementation and efficacy of all Legionellosis and Pseudomonas Management & Controls as well as temperature control and safe hot water management programmes across all sites constituting the Trust Estate.

The group consists of the Trust Responsible Person and Deputies, Infection Control Doctor and/or deputy (IPC lead nurse), Matrons or Ward Based Representative, Risk Manager, Estates Operation Manager, Hard FM Manager and the Trust Legionellosis Management & Control Consultants and Skanska team. Details of the Trust's water safety procedures are documented in DN654 Water Safety Plan available on the Intranet. Any concerns raised regarding water management are escalated through the ICPPC committee.

RPH have appointed an Authorising Engineer for water from Hydrop company who completes a yearly audit and completes a risk assessment to improve the water system health.

RPH have an approved and up to date water safety plan in place with robust surveillance of water sampling and control measure to maintain water safety throughout the trust.

5.7. Ventilation Safety

The Estates and Facilities Team chair and facilitate a monthly Ventilation Safety Group, with dates planned throughout the year.

The Ventilation Safety Group membership consists of the Trust Head of Estates, Operations Manager, Hard FM Manager, IPC Lead Nurse, Clinical Representation alongside representatives from OCS and Skanska. Appointed Persons also attend from each organisation.

The Trust recently appointed a Ventilation Authorising Engineer (AE), with plans to independently review the Ventilation system and develop a Ventilation Safety Plan for the site.

Any concerns, air flow systems and management via HTM 03-01 are discussed, raised and monitored within this group**.** This feeds into the ICPPC committee for assurance. The annual maintenance in high critical areas has a 14-month contractual obligation to be completed. These reports for 23/24 have been reviewed and approved at the ICPPCC, due to meeting the verification criteria for critical ventilation. .

An audit is planned for 2024/25 by our AE with a view to support the trust to develop a ventilation safety plan.

6. Training Activities

Infection Prevention and Control training mandatory sessions were delivered as outlined in Table 11.

Table 11- teaching sessions

Teaching sessions	Frequency	Delivered by
Induction session for **all** new starters	Monthly	Presentation provided and reviewed by IPC team; supervised by education team. 100% attendance as it is mandatory to complete.
IPC study day	Quarterly	Presentation presented by the IPC lead surrounding current hot topics and findings.
Training for Foundation and Core Medical Trainees	Three times yearly	Education manages this with IPC supporting updates.
Update for qualified nurses in cardiac and thoracic directorate via e-learning	Level 1 – every 3 years. Level 2 - Annually	Standard e-learning package Mandatory requirement
Update for non-qualified nurses in cardiac and thoracic directorate via e-learning	Every 3 years	Standard e-learning package Mandatory requirement
Hand hygiene update for all other clinical staff via Hand Hygiene week for practical plus e-learning	Annually	IPCT to complete- Hand hygiene awareness week
Training session for Housekeepers via e-learning	Annually	IPC team review and update training pack.
M. abscessus essential training	One off training	Standard e-learning package. Updated by IPC team. Ad hoc teaching session via teams supported by IPC team.

Summary
The trust achieved 100% compliance for IPC training on induction for all new starters in 2023/24.

Compliance with Infection Prevention and Control annual updates is a requirement for all staff for completion of their annual appraisals. All mandatory training data is shared to the management teams for them to manage

and support is provided to increase training compliance. ESR training mandatory IPC training compliance is reviewed at the ICPPC Committee. Compliance for training for 2023/24 is displayed in table 12

Table 12- Compliance with IPC mandatory training

CTSF Requirements (Excluding starters in last 3 months) **As at 30.04.2024**

Updated Competency	No. Required	No. Compliant	% Compliant
Infection Prevention and Control- Level 1	2058	1927	93.63%
Infection Prevention and Control- Level 2	1542	1280	83.01%

M. abscessus training was implemented in May 2021 for staff to complete via online training. This was to encourage all staff to have awareness and education in respect to *M. abscessus*. 2023/24 training continued to be monitored through ICPPCC.

Table 13- Compliance with M abscessus training

Excluding Temporary Staffing (Clinical)	No. Required	No. Compliant	% Compliant
M.abcessus Training	1961	1574	80.27%

7. Annual Programmes

Table 14- IPC Annual Audit Programme and Result 2023/2027 (Criteria 1-10)

Title	Frequency	Results 2022/23	
Hand Hygiene	Monthly	98%	
HII*	Monthly	85%	*High Impact Interventions HII5 – Ventilated patients (78%) HII8 – Cleaning and decontamination of clinical equipment (92%)
ANTT	Monthly	94%	
MRSA Screening	Yearly	94%	
Isolation	Monthly	74%	
Vulnerable group and POU filter (*M. abscessus*)	Monthly	77%	
Sharps	Annual	96%	Summary: All audits are taken to the ICPPC for review and robust action plans completed so everyone has an overall insight. IPC and audit team work closely and share monthly reports to the clinical team.
Linen	Annual	90%	
Environment	Annual	94%	
Hand Sanitiser	Annual	92%	
Hand Hygiene technique	Annual	95%	
Waste	Annual	92%	
CVC BSI	Quarterly	See comments above	
Scrubbing and Gowning	Rolling	Not completed	
Skin Prep	Rolling	96%	
National Surgical Audit (NICE guidelines)	Rolling	See comment under SSI.	

Summary: 2023/24 Audit plan was reviewed and approved through ICPPCC.

2023/24 results are consistent compared to 2022/23 with the occasional month of lower compliance. IPC have raised the awareness on the importance of Hand Hygiene which has seen a higher number of audit episodes this year compared to last year. The audit process, with peer review and narrative behind the non-compliance and action plan have much improved this year meaning a more robust audit cycle.

8. Influenza and COVID-19 Vaccine Uptake

Table 15 - Influenza and COVID-19 Vaccine uptake for 2023/24 Season (Criterion 1, 10)

	Flu	Covid Booster
Number of vaccinations administered at RPH	1414	1263

NB. will include vaccinations given to OCS, Skanska, Volunteers etc

	Flu	Covid Booster
Number of RPH staff vaccinated (includes those vaccinated elsewhere but does not include OCS/Skanska/Volunteers)	1190	1061
% of eligible* RPH staff vaccinated (includes those vaccinated elsewhere but does not include OCS/Skanska/Volunteers)	50.3%	44.8%

	Flu	Covid Booster
% of eligible* RPH staff vaccinated – Clinical Roles	46.9%	41.6%
% of eligible* RPH staff vaccinated – Non-Clinical Roles	61.3%	55.5%

* Number of 'eligible staff' can change due to starters and leavers.
Bank/Locum staff are included but only those that have worked a shift at RPH in the last three months

Immunisation of frontline staff against influenza and COVID-19 reduces the transmission of infection to vulnerable patients. This year's flu programme was run by the Royal Papworth team and delivered from September 2023 to November 2023 in combination with the COVID boaster vaccine programme. The data is uploaded to UKHSA via the ImmForm system. There has been a further decline in staff uptake from previous years. It is not clear why this is.

9. Inoculation Injuries

9.1. Annual Quarterly Figures

Table 16- Annual Quarterly Figures of Inoculation Injuries

Year	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total
2020/21	5	5	9	8	27
2021/22	9	8	11	22	52
2022/23	10	5	10	12	37
2023/24	14	8	9	14	45

This year has seen a slight increase in sharps injuries reported from previous year but it is still lower than rates recorded in 2021/22.

Reasons for this could include improved documentation on sharps, splash and needlestick injuries (SSNI) over the reporting period as well as impact from the doctors' strikes. There were 28 doctors' strikes in 2023 with 10 in Quarter 4 in 2024. During this period, other health professionals who assumed additional responsibilities, which, they would not normally undertake, covered clinical work.

9.2. Areas Reporting Incidents

Table 17

Directorate	Qtr1	Qtr2	Qtr3	Qtr4	Grand Total
Cardiology RPH	2		2	2	6
Clinical Support Services RPH	2				2
Medical RPH				1	1
Surgery RPH				1	1
CCA/ Theatre	10	8	7	10	35
Grand Total	**14**	**8**	**9**	**14**	**45**

The high number of reported incident is CCA and Theatres, which has the highest risk factors.

10. Risks Associated to IPC

There is always risk associated to IPC and these are monitored through the ICPPC committee and QRMG. Any emerging risk and escalation from ICPPC committee goes to the Quality Risk Management group. There are two main overarching risk which are reviewed and updated monthly as a board assurance risk. One is the risk to patient if RPH fail to protect patient from harm from hospital acquired infection and the other is regarding the outbreak of M.abcessus and the risk to patient who are vulnerable to this infection.

11. Summary of Key Areas for this Coming Year

The IPC team are committed to work with all departments and services to maintain a safe environment for patients, staff and visitors. As 2023/24 ended we look forwards to 2024/25 and areas that the IPC team will continue to focus attention on are:

- Continue to complete a gap analysis of the Hygiene code and complete the new updated IPC national board of assurance (BAF) framework. To support this work and improve our compliance where it was identified as partial or non-compliant:

- Work closely with the decontamination lead to develop a robust decontamination sub-committee and support the transition of sterile services and the endoscope services, maintaining a safe sterile service.
- Enhance assurance reports to the ICPPC committee from the soft services and ventilation safety group, by full engagement from the Estates team, completion of a yearly audit and follow up on actions. Appointing an AE in April 2024 for ventilation to support the safety group and develop a Ventilation safety plan.
- Occupational Health team to provide assurance report to ICPPCC quarterly- by working closely with the team.
- To fully implement and embed the new 2021 national cleaning standards entirely at Royal Papworth Hospital NHS Foundation Trust by attending regular audit and IPC to be part of the soft services meeting
- Support and work alongside the health & safety committee to maintain staff safety and developing IPC within the patient safety framework.
- Develop a program to support annual training compliance for hand hygiene.

- Continue working with the SSI stakeholder group to improve the surgical site infections rates. Ongoing work which will include:
  - Increase the IPC environment rounds on the surgical wards with clinical engagement
  - Support the SSI surveillance team with implementing prevention intervention.
  - Work with the theatre team to reduce Footfall in the theatre department and capacity within the theatre room.

- Management and maintain safety mitigation throughout RPH with M.abcessus by:
  - The executive corporate group will continue to monitor for a further 6 months and then review.
  - Use the risk assessment completed and work on the actions and risks identified to maintain safety.

12. References and Resources

IPS & NHS Improvement (Nov 2017) 4th Ed of Saving Lives: High Impact Interventions,

Department of Health (2015), Health and Social Care Act 2008, Code of practice on the prevention and control of infections and related guidance

Department of Health (2003), of the Chief Medical Officer's strategy for infection control (*Winning Ways: working together to reduce healthcare associated infection*)

NHS Improvement & Infection Prevention Society (2017) High Impact Interventions: Care processes to prevent infection. 4th Ed

Public Health England 2017. Guidance, Health matters: preventing infection and reducing antimicrobial resistance. [ONLINE] Available at: https://www.gov.uk/government/publications/health-matters-preventing-infections-and-reducing-amr/health-matters-preventing-infections-and-reducing-antimicrobial-resistance [Accessed May 2018]

National Infection Prevention and Control Manual (NIPCM) for England. [ONLINE] Available at: https://www.england.nhs.uk/national-infection-prevention-and-control-manual-nipcm-for-england

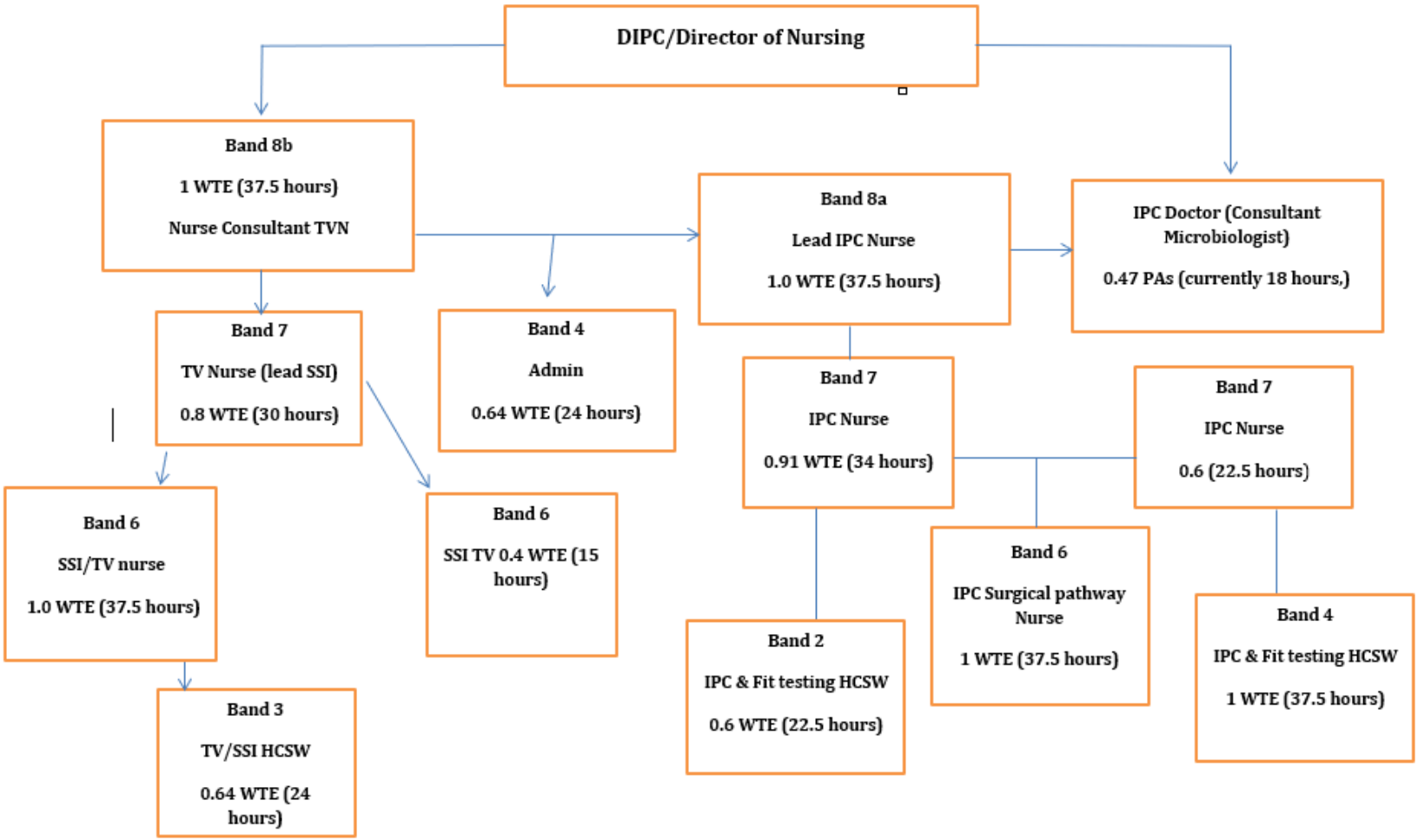
Appendix 1

The requirements of the Health and Social Care Act (2008) updated in this report in line with revised guidance issued July 2015.

Compliance criterion	What the registered provider will need to demonstrate
1	Systems to manage and monitor the prevention and control of infection. These systems use risk assessments and consider the susceptibility of service users and any risks that their environment and other users may pose to them.
2	Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections.
3	Ensure appropriate antimicrobial use to optimise patient outcomes and to reduce the risk of adverse events and antimicrobial resistance.
4	Provide suitable accurate information on infections to service users, their visitors and any person concerned with providing further support or nursing/medical care in a timely fashion.
5	Ensure prompt identification of people who have or are at risk of developing an infection so that they receive timely and appropriate treatment to reduce the risk of transmitting infection to other people.
6	Systems to ensure that all care workers (including contractors and volunteers) are aware of and discharge their responsibilities in the process of preventing and controlling infection.
7	Provide or secure adequate isolation facilities.
8	Secure adequate access to laboratory support as appropriate.
9	Have and adhere to policies, designed for individual's care and provider organisations that will help to prevent and control infections.
10	Providers have a system in place to manage the occupational health needs and obligations of staff in relation to infection.

Appendix 2

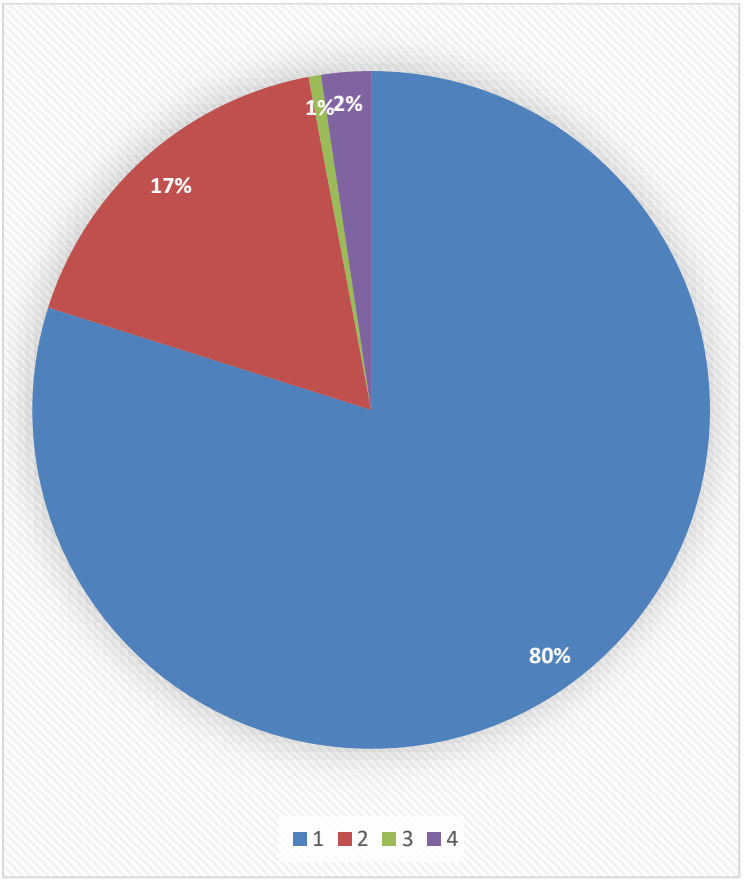
Infection Prevention and Control Team (Criterion 1)



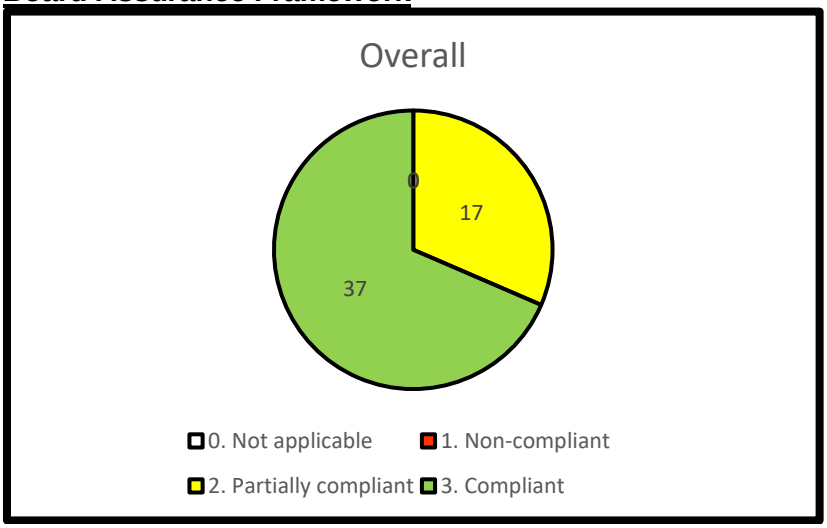
Appendix 3

Hygiene Code Gap Analysis 2023/2024

	Compliant	Partial compliance	Non-compliance	Not Completed
Criterion 1	24	6	0	**0**
Criterion 2	8	8	0	**0**
Criterion 3	3	2	1	**0**
Criterion 4	13	0	0	**0**
Criterion 5	2	0	0	**0**
Criterion 6	1	2	0	**0**
Criterion 7	2	0	0	**0**
Criterion 8	4	0	0	**0**
Criterion 9	65	8	0	**4**
Criterion 10	13	3	0	**0**
Total	**135**	**29**	**1**	**4**



Board Assurance Framework



Appendix 4

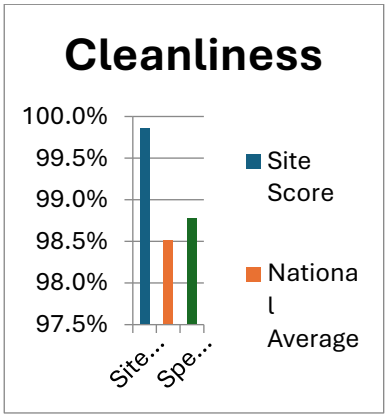
Patient Led Assessments of the Care Environment (PLACE) Programme 2023/24

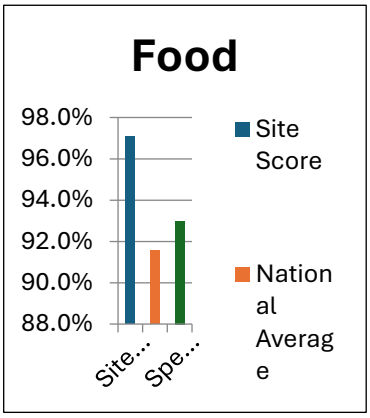
All healthcare providers are required to take part in the national Patient-Led Assessment of the Care Environment (PLACE) annual inspections. PLACE is a national self-assessment tool designed to measure standards of:

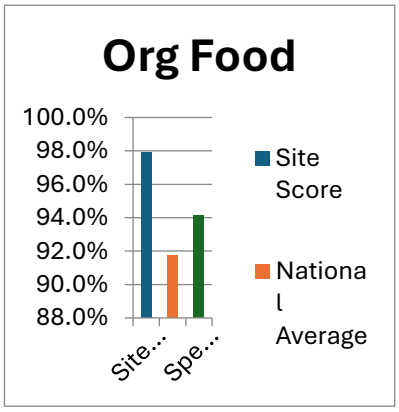
- Cleanliness,
- Food comprising Organisation Food and Ward Food
- Privacy, Dignity & Wellbeing,
- Building Condition, appearance & maintenance,
- Dementia friendly environment
- Disability friendly environment

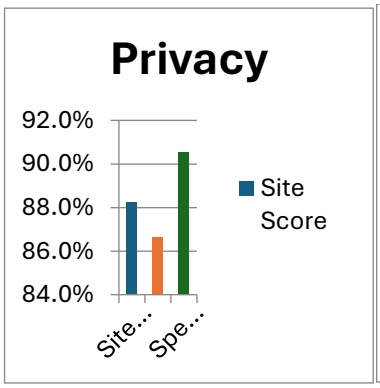
The Health & Social Care Information Centre (HSCIC) provide comprehensive guidance on the organisation and conduct of assessments and separate guidance documents for staff assessors and patient assessors. PLACE assessments are carried out by internal and external assessors within inpatient facilities and the surrounding patients assessed environment. Assessors include Governors, Volunteers, Trust members and representatives from the Trust's facilities contractors. Staff areas and clinical treatments are excluded from this assessment.

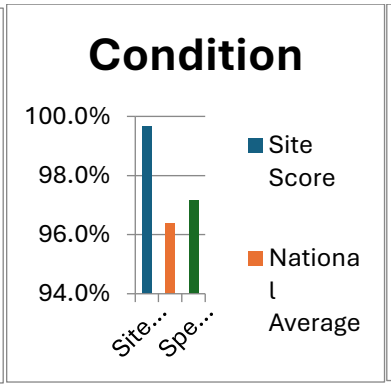
The tables below demonstrate the Trust performance against the national average. The Trust has scored above the national average in the following areas: cleanliness; food including organisation food and ward food; condition, maintenance and appearance, dementia and disability, demonstrating that the new site is of an exceptional standard.

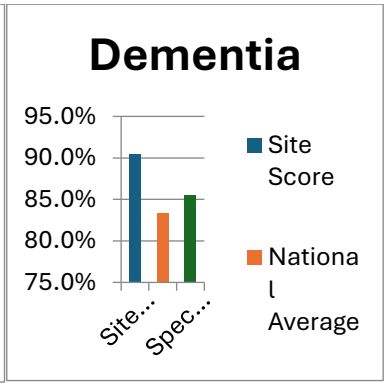


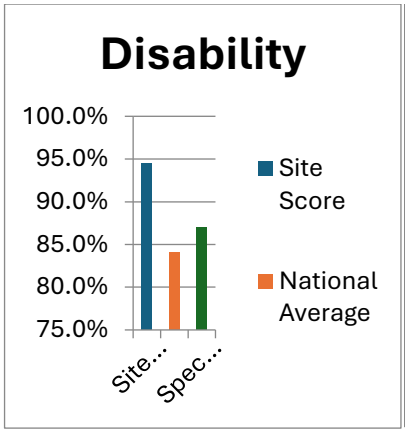


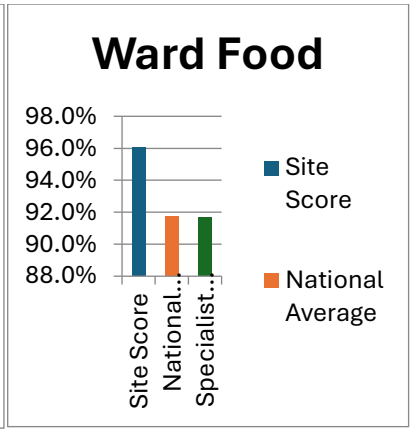












Area	2023 Site Scores	2023 National Average	Comments
Cleanliness	**99.86%**	98.52%	The Trust's cleaning service OCS are continuing to uphold the levels of site cleanliness and maintained staff numbers throughout the year. The audit results show cleaning has this year scored above the national average, and improved on previous year's score.
Food (comprising Organisation and Ward Food)	**97.1%**	91.6%	Food scores are high for this year following a high level of input between Trust and OCS teams to ensure patient food quality is of a high level. In efforts to improve the training/education/ management of the Housekeepers, the Trust employs a Patient Catering Manager to ensure standards are maintained. The role of the Manager aims to assist with development of housekeeping staff skills such as presentation, allergen understanding and service times to maintain an effective housekeeping relationship, which in turn allows us to deliver a more efficient food service to our patients.
Organisation Food	97.9%	91.8%	
Ward Food	96.1%	91.%	
Privacy, Dignity & Wellbeing	88.2%	86.7%	The score for this year has improved on previous year and remains above national average. The provision of single ensuite rooms, enhanced patient entertainment systems and a more patient focused care environment has assisted with a high score for the site.

Condition, Appearance & Maintenance	99.7%	96.4%	The Trust continues to focus in this area with PFI partners to maintain the condition and maintenance of the site, particularly focusing on clinical areas. It is essential and remains a priority for the Estates and Facilities team that we continue to deliver a safe and well-maintained environment for our patients and visitors.
Dementia	90.4%	83.4%	The Trust has improved on previous years' scores and on national average in the Disability and Dementia-friendly elements and works with advisors to review and improve where opportunity exists.
Disability	94.4%	84.1%	

Action Plan

A few minor issues relating to cleaning and maintenance were brought up in the feedback session. Due to the regular Patient Environmental rounds the issues identified during the PLACE audit were successfully captured and completed.

Summary

The Patient-Led Assessments of the Care Environment (PLACE) are an annual assessment of the non-clinical aspects of the patient environment, how it supports patients' privacy and dignity, and its suitability for patients with specific needs e.g. disability or dementia. The PLACE assessment tool provides a framework for assessing quality against common guidelines and standards defined by professional healthcare service delivery organisations and field experts.

This is the eight year the PLACE assessment programme that has run nationally, allowing us to benchmark against national averages. We will continue to carry out the assessments with a greater number of smaller teams over the forthcoming years.

We're grateful for the continuing support of Governors, volunteers and past patients who have participated in the assessments.

Once again the outcome shows that while we have a diverse spread of inpatient environments, the quality of the cleanliness and condition, appearance and maintenance remains at a high standard across the whole Trust. This is reflected in the Trust score being above the national average in all categories.

Patient Assessors Feedback

The Governors and staff assessors who spoke to patients reiterated the excellent standards to which the Hospital is being maintained.