## 

|  |  |
| --- | --- |
| **Committee / Group / Meeting, Date** | |
| Infection Prevention and Control & Cleanliness Meeting 25th July 2023 | |
| **Author:** | **Contributors:** |
| Name: Samantha Young  Role/Title:Associate Director for IPC | Anna Morris – IPC Clinical Lead  Hayley Gingell – IPC Assurance Lead  Sian Langford – Estates and Facilities |
| **Report sign-off:** | |
|  | |
| **Is the report suitable for publication?:** | |
| NO | |
| **Key issues and considerations:** | |
| The IPC Annual Report demonstrates the activities of RJAH relating to infection prevention and control from April 2022 to March 2023, including progress made against the work plan and targets identified in the Infection Prevention and Control Annual Programme. It also includes performance against key areas in Infection Prevention and Control. Ward specific audits are reported on a monthly basis through Trust wide Key Performance Indicators (KPIs). | |
| **Strategic objectives and associated risks:** | |
| The report fulfils its statutory requirements under the Health and Social Care Act 2008: Code of Practice on the prevention and control of infection and related guidance, which sets out ten criteria of which a registered provider must be compliant. The prevention and management of infection is the responsibility of all staff working withing RJAH and is integral to patient safety. The Infection Prevention and Control Team maintains organisational focus and works collaboratively to deliver the IPC strategy to ensure continued compliance with IPC practices.   |  |  | | --- | --- | |  | What providers will need to show evidence of | | Criterion 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. | | Criterion 2 | Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections | | Criterion 3 | Ensure appropriate antimicrobial use to optimise patient outcomes and to reduce the risk of adverse events and antimicrobial resistance | | Criterion 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 | | Criterion 5 | Ensure that people who have or at risk of developing an infection are identified promptly and receive the appropriate treatment and care to reduce the risk of transmission of infection to other people. | | Criterion 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. | | Criterion 7 | Provide or secure adequate isolation facilities. | | Criterion 8 | Secure adequate access to laboratory support as appropriate | | Criterion 9 | Have and adhere to policies, designed for the individual’s care and provider organisations that will help to prevent and control infections. | | Criterion 10 | Providers have a system in place to manage the occupational health needs and obligations of staff in relation to infection | | |
| **Recommendations:** | |
| The IPCCM members are asked to review and approve the annual report as an accurate record of the implementation of IPC practices for 2022-2023. | |
| **Report development and engagement history:** | |
| This report is devised annually and offers an overview of quality specific to The Health and Social Care Act | |

**Infection Prevention & Control and Cleanliness Report 2022/23**

**Forward**

**A person with a grey shirt and blue lanyard

Description automatically generated**As the Director of Infection Prevention and Control (DIPC), I am proud to introduce the Trust’s Infection Prevention and Control annual report for the year 2022/23. It describes the achievements of the Trust under the specialist advice, guidance and leadership of our Infection Prevention and Control (IPC) Team led by the Deputy DIPC.

The report highlights the important changes we have made in managing IPC following the MRSA outbreak and the incredible achievements made by our clinical teams, estates and facilities in a short period of time to ensure our Trust met the required standard of IPC set by our Regulators and NHS England. This allowed increased oversight and leadership in managing IPC, which was strengthened by ensuring compliance with the new Health and Social Care Act update, as well as the new IPC Board Assurance Framework.

We have also enhanced our governance of infection prevention and control by stepping up an Infection Prevention and Control Quality Assurance Committee and I am delighted to say that the assurances provided to the Committee meant that this too could be stepped down to business as usual with the IPC Working Group operationally delivering and monitoring all IPC related activity through our IPC Quality Management System.

Following a series of away days, the IPC Team developed their IPC Strategy which was launched at the first ever IPC summit with our colleagues from Shropshire Community Health Trust. We also joined in a campaign entitled “gloves off” aligned with NHSE’s campaign to reduce inappropriate PPE wearing and to do our bit in reducing unnecessary plastic waste and further campaigns are planned through next year to keep our staff and Teams motivated and educated on emerging evidence and guidance.

We can demonstrate that infection prevention and control is taken very seriously here at the Trust, and we are committed to providing the highest standard of care in a safe and clean environment.

A close-up of a note

Description automatically generated

Paul Kavanagh-Fields

**Chief Nurse, Director of Infection Prevention & Control, and Patient Safety Officer**

**Glossary of terms**

|  |  |
| --- | --- |
| Bacteraemia | The presence of bacteria in the blood without clinical signs or symptoms of infection |
| CDI | Clostridiodes difficile infection. It is a bacterium found in the intestines of around 1 in 30 adults, and usually causes no harm. It can produce toxins which cause infection and can be difficult to treat. |
| E coli | Escherichia Coli is a bacterium found in the intestines. It can cause infecitons and can prove difficult to treat. |
| HAI | Healthcare Associated Infection. An infection acquired after receiving treatment in a health care setting. |
| MRSA | Methicillin Resistant Stapholococcus Aureus, is a highly resistant strain of the common bacteria |
| MSSA | Methicillin Sensitive Stapholococcus Aureus, is the more common sensitive strain of Stapholococcus Aureus. |

**Acronyms**

|  |  |
| --- | --- |
| AE (D) | Authorised Engineer (D) |
| AMS | Antimicrobial Stewardship Committee |
| ANTT | Aseptic Non Touch Technique |
| CAUTI | Catheter-Associated Urinary Tract Infection |
| CQC | Care Quality Commission |
| DIPC | Director of Infection Prevention & Control |
| E.Coli | Escherichia coli |
| HAI | Healthcare Associated Infection |
| HPV | Hydrogen Peroxide Vapour |
| HTM | Health Technical Memorandum |
| IPC | Infection Prevention & Control |
| IPCC | Infection Prevention & Control Committee |
| IPCT | Infection Prevention & Control Team |
| ICD | Infection Control Doctor |
| ICS | Integrated Care System |
| KPIs | Key Performance Indicators |
| MDT | Multi Disciplinary Team |
| PIR | Post Infection Review |
| PLACE | Patient Led Assessment of the Care Environment |
| SATH | Shrewsbury and Telford Hospitals |
| SSI | Surgical Site Surveillance |
| SNAHP | Senior Nurse and Allied Health Professionals |
| SOP | Standard Operating Procedure |
| TSSU | Theatre Sterile Services Unit |
| UKHSA | UK Health Security Agency |
| WTE | Whole Time Equivalent |

### **Introduction**

The Robert Jones and Agnes Hunt Orthopaedic Hospital NHS Foundation Trust (RJAH) is a specialist orthopaedic centre. We provide specialist and routine orthopaedic care to our local catchment area, as well as specialist services both regionally and nationally.

Our organisation is a single site hospital based in Oswestry, Shropshire, close to the border with Wales. We serve the people of England and Wales, as well as acting as a national healthcare provider. We also host some local services which support the communities in and around Oswestry. The hospital is a specialist centre for the treatment of spinal injuries and disorders, and also provides specialist treatment for children with musculoskeletal disorders. Additionally, the Trust works with partner organisations to provide specialist treatment for bone tumours and community based rheumatology services.

The Trust is part of the National Orthopaedic Alliance (NOA), an acute care collaboration vanguard designed to improve orthopaedic care quality across England.

As a member of Shropshire, Telford and Wrekin Integrated Care System, we strive to deliver world class care by working in partnership to continuously improve and meet the needs of those we serve.

**Health & Social Care Act**

In December 2022 the Health & Social care Act 2008 was been revised. The code now reflects the changes required to meet the Health and Social Care Act 2008 (Regulated Activities) Regulations 2014 and the role of infection prevention (including cleanliness) in optimising antimicrobial use and reducing antimicrobial resistance

|  |  |
| --- | --- |
|  | What providers will need to show evidence of |
| Criterion 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. |
| Criterion 2 | Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections |
| Criterion 3 | Ensure appropriate antimicrobial use to optimise patient outcomes and to reduce the risk of adverse events and antimicrobial resistance |
| Criterion 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 |
| Criterion 5 | Ensure that people who have or at risk of developing an infection are identified promptly and receive the appropriate treatment and care to reduce the risk of transmission of infection to other people. |
| Criterion 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. |
| Criterion 7 | Provide or secure adequate isolation facilities. |
| Criterion 8 | Secure adequate access to laboratory support as appropriate |
| Criterion 9 | Have and adhere to policies, designed for the individual’s care and provider organisations that will help to prevent and control infections. |
| Criterion 10 | Providers have a system in place to manage the occupational health needs and obligations of staff in relation to infection |

**Key Achievements 2022/23**

* We have created a number of new roles in the IPC team this year. We recruited a 1.0 WTE B5 Surgical Site Surveillance Practitioner which has enabled us to expand the surgical site surveillance service and collaborate with the Multi-Disciplinary Team (MDT) to promote prevention of surgical site infection. We also secured a position for a B2 Support Secretary who was recruited in November 2022; this role has provided the IPC team with much needed administrative support. We recruited a 1.0 WTE B3 IPC Support Worker (IPCSW) who has worked hard to improve Trust compliance to hand hygiene practical competency assessments. The IPCSW role has developed throughout the year to include auditing and taking part in project work to promote IPC across the Trust. Hand hygiene competencies are now recorded on the Electronic Staff Record (ESR) which enables the Trust to monitor compliance to the Trust target.
* The Trust had a target of zero for MRSA bactereamia which we have successfully maintained for 2022-23.
* To strengthen our auditing process, we implemented a structured auditing programme with escalation process in place. Common themes for non-compliance are now easily identified using an internal software auditing system so that a targeted approach to improvement can be made.
* The B6 IPC nurse completed a Master’s course through Birmingham City University which has provided a foundation of theory to underpin practice.
* Following an outbreak of MRSA during summer 2021, which involved hospital acquired MRSA for eight patients, the Trust continued to work hard to implement changes outlined by NHS England. We acknowledge that the outbreak was caused by several failures in our processes and we have made the most of the opportunity to improve our estate, and practices; to ensure that IPC remains high a high profile across the Trust.
* The IPC team led an interactive IPC Fayre in collaboration with the Estate & Facilities team in June 2022 with a focus on standard infection control precautions. Over 200 staff attended the day and were provided with workshop style training around effective cleaning of the patient environment, including bed cleaning from the bed providers. As the day was such a success the IPC team plan to repeat the event at least once a year going forward.
* After a series of IPC team away days, we developed our vision for the future of infection prevention and control within our Trust. We presented our journey of improvement and our vision to around 100 members of the ICS at an IPC Summit, which was supported by our Associate Director for IPC for the Midlands Region. We worked jointly with SCHT IPC team to align our ambitions and have developed a collaborative approach to our aim to reduce healthcare associated infections. The below graphic shows our drivers which have lead to our ambitions:

A diagram of a diagram

Description automatically generated

**Criterion 1: Systems to manage and monitor the prevention and control of infection.**

**IPC Structure**

Director for IPC

Associate Director for IPC

IPC Clinical Lead Nurse

Anna Morris

IPC Assurance Lead

IPC Nurse Specialist

SSI Nurse

SSI Practitioner

IPC Support Worker

IPC Support Secretary

The **Chief Executive Officer** has overall responsibility to ensure that systems and resources are available to implement and monitor compliance with infection prevention and control at RJAH.

The **Director of Infection Prevention & Control** **(DIPC)** is the Executive Lead for IPC, and oversees the implementation of the IPC programme of work through their role as Chair of the Trust Infection Prevention and Control and Cleanliness Committee (IPC&CC). The DIPC delegates the responsibility and management of IPC for the Trust to the Deputy Director for Infection Prevention and Control (DDIPC). The DDIPC reports directly to the DIPC and on to the Chief Executive and the Board on all IPC matters.

The Trust employs an Infection Control Doctor who is employed by SaTH and has a contract to deliver services for RJAH in the in and out of hours period which includes clinical microbiology advice and reporting, microbiology ward rounds, antimicrobial stewardship and infection prevention and control advice. The ICD:

* Advises and supports the DIPC
* Oversees local IPC policies and their implementation by ensuring that adequate laboratory support is in place
* Attends the Water Safety Group and Decontamination Group
* Chairs the Trust Antimicrobial Stewardship Committee
* Provides expert clinical advice on infection management
* Attends the weekly Infection MDT meetings and provides expert advice on complex/infected cases
* Has the authority to challenge clinical practice including inappropriate antibiotic prescribing.

**The Infection Prevention and Control Team (IPCT)**

The Infection Prevention and Control Team (IPCT) are the medical and nursing infection prevention and control specialists responsible for providing a proactive IPC service to the Trust aligned to the National Infection Prevention and Control Manual, the IPC Strategy and their progamme of works.

RJAH Orthopaedic Hospital NHS Foundation Trust (RJAH) IPCT currently consists of:

* Deputy Director of IPC (0.5 WTE)
* Infection Prevention and Control Lead Nurse: Band 7 (1 WTE)
* Infection Prevention & Control Nurse Specialist: Band 6 (1 WTE)
* IPC Assurance Lead (1 WTE): Band 6
* Surgical Site Surveillance Nurse: Band 5 (0.4 WTE)
* Surgical Site Surveillance Practitioner Band 5 (1 WTE commenced in post May 23)
* IPC Support Worker Band 3 (1 WTE commenced in post May 23)
* IPC Administrator/Support Secretary Band 2 (1 WTE commenced in post Nov 22)
* The Infection Control Doctor (0.4 WTE)

In November 22 the IPC Data Analyst role was uplifted to a permanent IPC Assurance Lead. The IPC Assurance Lead will continue to manage the IPC Quality Management System (QMS) to refine and strengthen governance within the department.

In March 2022, we said goodbye to our B7 IPC Lead Nurse Sue Sayles who has taken retirement after a 13 year career in infection prevention and control. The Trust thank Sue for the hard work and dedication to the role at RJAH. We are delighted to announce that we are not losing her services as she continues to work in a role aligned to patient care.

**The Antimicrobial Pharmacist**

The Trust has a designated Antimicrobial Pharmacist role. They work with the ICD and other members of the IPC team. The role of the antimicrobial pharmacist includes:

* Attending and contributing to the Trust Infection Prevention & Control Committee meetings, weekly Infection MDT Meetings and the Antimicrobial Stewardship Committee meetings
* Supporting antimicrobial stewardship initiatives
* Participating in and contributing to the weekly ward rounds with the ICD and IPC nurse specialist
* Lead for the Trust antimicrobial CQUINs
* Maintaining a robust programme of audits in line with national guidance
* Providing training and education regarding antimicrobial stewardship to clinical staff within the Trust

**Infection Prevention Control & Cleanliness Committee**

The RJAH Infection Prevention & Control Committee (IPC&CC) is a multidisciplinary Trust Committee with stakeholder representation from UKHSA and the ICB. The IPC&CC oversees the activity of the IPCT and observes the implementation of the infection control programme of work. In February 2022 IPC&CC meetings were increased to monthly for additional assurance and increased oversite at Board level.

**The IPC Programme of Work**

The IPC Programme of Work 2022-23 was specifically designed to focus on achieving full compliance with the standards identified in the Health and Social Care Act, and to monitor compliance with national and local infection related thresholds. To ensure good momentum with improvements, the team opted to adopt an annual programme in order to meet deadlines assigned to works sited on the IPC Quality Improvement plan.

**Quality Management System**

We have designed a system to capture all data in relation to IPC. The system contains a data warehouse that consolidates all IPC related data and a central space for correlation of themes and trends. The system contains a dashboard providing a live position for IPC governance.

The system has been since evolved to include:

* Policy matrix and review tracker
* IPC unit reports linked to the system for auto-population of data. Reports are presented at Infection Control & Cleanliness Committee
* Reports to monitor and track actions relating to IPC generated from all sources.
* Rolling audit plan to include all IPC Assurance audits
* Live reporting to surgical site infections and statistical process charts.

**Infection Prevention and Control Working Group**

The Infection Prevention and Control, & Cleanliness Working Group (IPC&CWG) is group is to ensure that the Trust are fully engaged and proactive in delivering the IPC agenda aligned to the statutory requirements of The Health and Social Care Act 2008: Code of Practice on the prevention and control of infections (Revised December 2022) Care Quality Commission Standards and other national, regional or professional bodies. This involves robust oversight of leadership and ownership of IPC&C at a service and operational level.

The group provides a forum for discussion, review and approval of IPC&C and Estate related activity, policy, procedure and guidance, and monitors the progress of actions against the Infection Prevention and Control Quality Improvement Plan and IPC Quality Management System.

Infection Prevention and Control Working Group met on a weekly basis throughout 2022. The meetings were well attended with the IPC Quality Improvement plan as a standing item on the agenda to maintain traction with actions. This group reports to the Infection Prevention & Control and Cleanliness Committee. In December 2022, the frequency of this meeting stepped back to bi-weekly following NHSEI visit and the positive feedback of sustained improvements. The meeting provides effective communication between the IPC team, operational areas and Estates & Facilities by identifying and resolving issues in line with Trust priorities.

The meeting now oversees and approves Estates and Facilities works required to meet IPC standards. Costings and plan is then completed by the E&F team for formal approval at Capital Management Group (CMG).

**IPC Link Staff System**

The IPC Link Staff system enables the IPC team to deliver key information, education, and advice that is shared to the wards and departments in a cascade system. IPC Link Staff form part of a group that meets bi-monthly. The IPC team and the link staff ward/department managers agree to roles and responsibilities which clearly define the expectations of the link staff role. Attendance at meetings has continued to improve following step down of COVID-19 social distancing precautions and reintroduction of face to face meetings in November 2022. Will Walter, our IPC Support Worker has increased the number of link practitioners by promoting responsibility for IPC, and provided ‘train the trainer’ style training so that they can become responsible for hand hygiene practical assessments in their respective areas; in order to promote ownership of IPC practices.

**Board Assurance Framework**

The IPC Board assurance framework (BAF) was developed to help providers assess themselves against the guidance as a source of internal assurance that quality standards are being maintained. The framework offers providers a way to continually review processes and respond in an evidence-based way to maintain the safety of patients, service users and staff.

A further version of the BAF were released in 2021/22 with Version 1.11 released in September 22 with a renewed focus to ‘business and usual’ activities, alongside the ongoing management of COVID-19; supporting trusts to step down on IPC precautions to assist in the restoration of the services.

The Trust continue to demonstrate compliance to the Board Assurance Framework. Our compliance to the BAF is shown below:

A green and orange pie chart

Description automatically generated

Compliance to the BAF is monitored by the IPC team and reported through the IPC&CC for oversight.

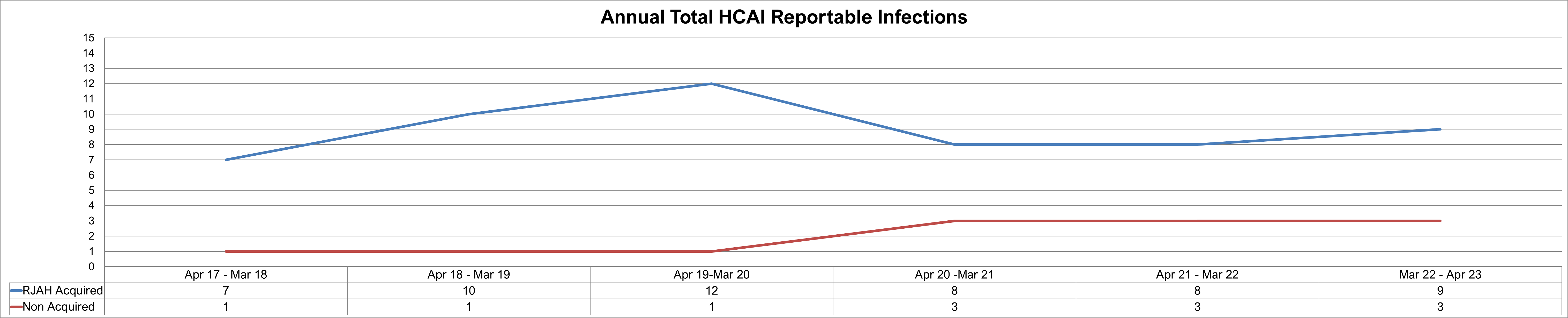
**Mandatory Surveillance**

All organisms of significance are monitored by the IPC team via a database supported by the SaTH laboratory so that timely action can be taken to support the clinical teams in the management of the patients, including safe patient placement and advise on isolation requirements.

**Healthcare Associated Infections**

Reducing health care-associated infections (HAIs) remains high priority, as we see the numbers rise nationally. The NHS Long-term plan supports a reduction in the number of Gram-negative bloodstream infections by 50% by 2024/25.

The graph below shows the total of Healthcare Associated Infections (HAI) blood stream infections reported from April 2017 to March 2023.



**Methicillin Resistant Staphylococcus Aureus Bacteraemia (MRSA)**

The Trust continues to report zero cases of MRSA bacteraemia for its 16th consecutive year.

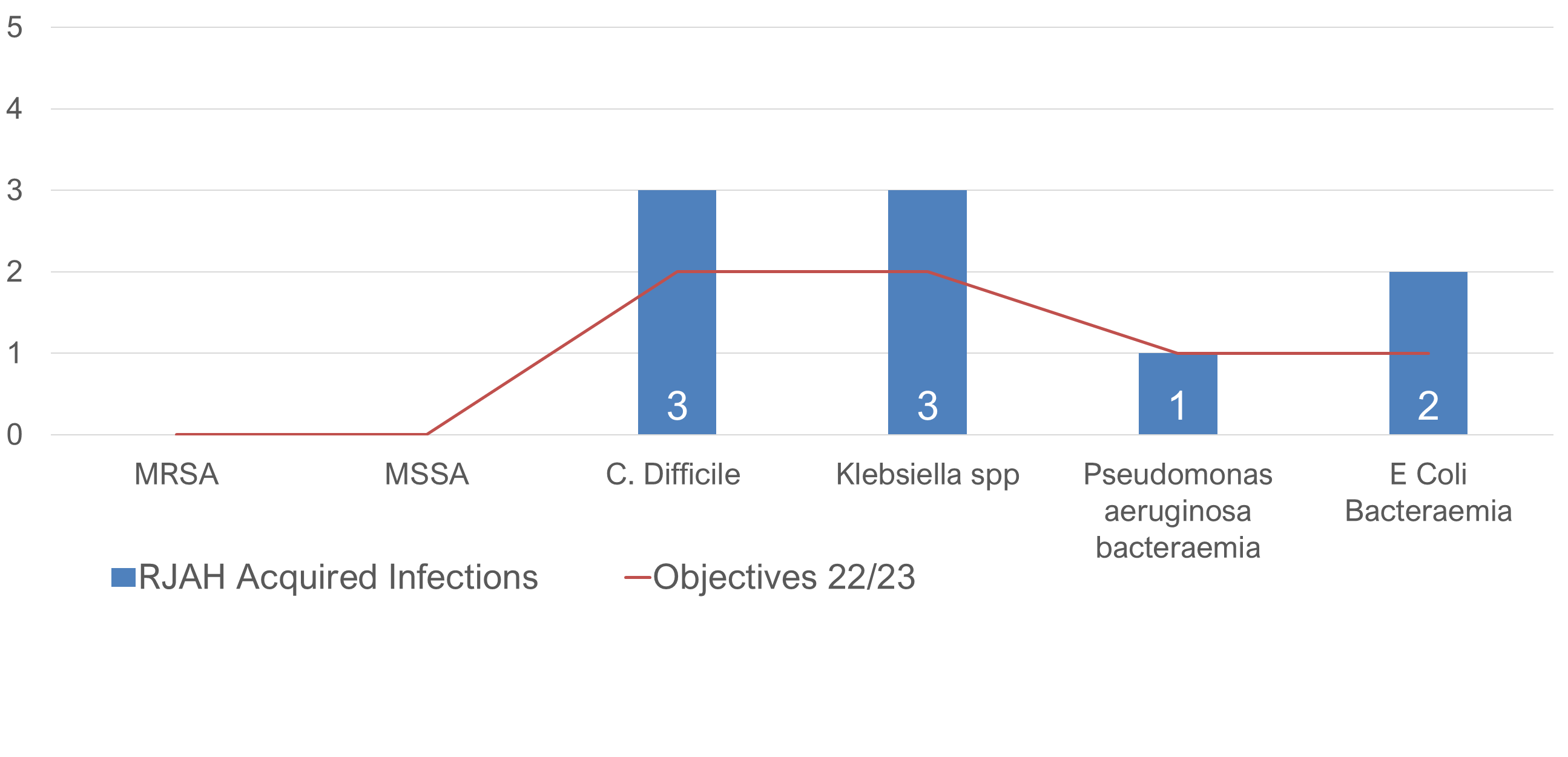
**Methicillin Sensitive Staphylococcus Aureus (MSSA)**

There were no Trust acquired MSSA bacteraemia reported in 2022-23.

**RJAH Acquired Infections**

The graph below shows that we exceeded our threshold for the following Alert organisms:

* E.*coli*
* Klebsiella *spp*
* C.*difficile*



E.coli

There were 2 cases of E.coli bloodstream infections against an objective of 1, which is a reduction of 1 case from the previous year.

Post-infection review meetings were undertaken for both infections with no identified cause found. The post-infection review provided opportunity to celebrate good practice around the documentation of catheters, however acknowledge that as a Trust we could do more to monitor the ongoing care of invasive devices. The Trust is involved with a number of regional collaboratives for the prevention of infection and moving into next year will be working together with the Integrated Care System to work on quality improvements around catheter care.

Post-infection reviews are summarised into an After Action Review poster so that learning can be shared to the wider teams.

Klebsiella spp

There were 3 cases of Klebsiella bloodstream infections against an objective of 2, resulting ina breach of our nationally set objective by 1. This is an increase by 2 cases compared to last year, which reflects the national picture. Whilst these seem like small numbers, we have continued to work towards finding ways to improve the care of invasive devices, particularly around the documentation of the Visual Infusion Phlebitis (VIP) score, as this has been a common theme of non-compliance during the post-infection review process. The Trust is working towards including VIP scoring into the current system used to record patient observations (VitalPac), with a view to this being implemented in June 2023.

The IPC team have also re-launched the use of the High Impact Interventions toolkit which is a peer to peer observation tool used to promote best practice standards, and are working with the clinical teams to to provide a more proactive approach to infection prevention.

Pseudomonas aeruginosa

Psuedomanoas aeruginosa and Klebsiella species bloodstream infections have been reportable since April 2018. The Trust reported 1 case of pseudomonas bloodstream infection which through completion of a post infection review was deemed unavoidable.

Clostridiodies Difficile

Clostridiodies difficile (C.*difficile*) is a bacterium found in the gut which can cause diarrhoea afer antibiotics. It can rarely cause a severe and life-threatening inflammation of the gut call pseudomembranous colitis. It forms resistant spores which require very effective cleaning and disinfection to remove them from the environment.

This year we reported 3 RJAH acquired cases of C.*difficle* infection against an objective of 2. 2 out of the 3 cases were on the same patient who had a relapse of symptoms. The Trust continues to review all cases through a post-infection review process; to establish areas of good practice, lapses in care and also identify improvements. Both cases of CDI were found to have significant risk factors; which contributed to the infection. The cases were managed in a timely manner, with no evidence of cross-infection. The IPC fayre in January 2023 rasied awareness to the importance of following enteric precautions for patients with suspected CDI. The IPC team have since introduced a new bowel chart to aid staff in making decisions around when to send stool samples upon suspecting CDI.



**Infection Prevention & Control Ward/Department Audits**

Wards and departments complete a package of infection prevention and control audits across the year in order to show continouous monitoring of standards. The suite comprises of environmental auditing, hand hygiene, and bare below the elbows (BBE).

The following graph shows the Trust’s compliance for each audit.

The results show that the Trust consistently achieved above the 95% target in all areas for IPC General Inspection, Hand Hygiene and Bare Below the Elbow (BBE).

**IPC Quality Assurance Walks**

The IPC team undertake regular audits called Quality Assurance Walks. The walks enable us to monitor standards of IPC within the wards/departments, such as hand hygiene, patient placement, cleanliness of the patient environment, linen management, waste management, and other standard infection control precautions.

Since introduction of the IPC Quality Assurance Walk system in August 2021, the team continue to undertake a rolling programme of assurance audits driven by a Red Amber Green (RAG) rated escalation process, with frequencies set in line with functional risk categories (National Standards of Cleanliness).

The IPC team priorities going forward include alignment of all audit toolkits to the National Infection Prevention and Control Manual for England (NIPCM); which will provide further assurance around standard infection control precautions.

This year a total of 66 walks were undertaken that identified common themes such as patient equipment not always being labelled as clean, and some non-conplinace of cleanliness around shared equipment such as commodes and toilet seat raisers. Quality assurance walks are documented using an electronic programme that enables actions to be idenfied to the responsible ward/dept manager straight away. All actions are monitored through an Infection Prevention and Control & Cleanliness Working Group (IPCWG) on a bi-weekly basis for oversight, to ensure that actions are dealt with in a timely manner.

This year, the IPC team are pleased to report 100% compliance to the IPC QA walk plan.

OneTogether

OneTogether is a partnership between leading professional organisations with an interest in the prevention of surgical site infection (SSI). The partnership has been initiated as a quality improvement collaborative with the aim of promoting and supporting the adoption of best practice to prevent SSI throughout the patient’s surgical pathway.

The OneTogether assessment tool has been designed to demonstrate compliance across the surgical pathway and is set out in 7 standards:

1. Skin preparation
2. Prophylactic antibiotics
3. Patient warming
4. Maintaining asepsis
5. Surgical environment
6. Wound management
7. Surveillance of surgical site infection

In November 2021, we completed the OneTogether assessment as it gave us the opportunity to assess and monitor standards of practice along the patients’ surgical journey. This has enabled us to identify areas for improvement; and with the implementation of a surgical site infection prevention working group (SSIPWG), actions were identified and completed.

The Trust showed remarkable improvements in its compliance to the IPC led OneTogether assessment of the surgical pathway, with a compliance score of 95% compared to 63% in 2021. Improvements have been made in relation to standard operating procedures that clearly define expected standards. This accounted for the majority of the increased compliance scores, as standards in practice were consistently high in both 2021 and 2023 assessments.

General findings included from the assessment in 2023 included improvements had been made around the monitoring of patient temperature during the intra-operative phase with some improvements required around documentation of temperatures during surgery.

The SSIPWG continued to meet bi-weekly throughout 2022/23 with meetings being chaired by the MSK Matron to maintain pace on action completion.

Hand Hygiene & Bare Below the Elbow

In May 22 hand hygiene training was uploaded to ESR as a mandatory module for all staff in order to monitor hand hygiene competencies. Compliance to this training was monitored in line with all other mandatory training modules by the Learning & Development Team. Staff training compliance is circulated to managers and full report is presented to the Infection Control & Cleanliness Committee.

In response to low compliance reported for 2021-22 relating to hand hygiene technique, our IPC Support Worker Will Walter implemented a programme of hand washing assessments to suport staff to obtain full hand hygiene competency.

Since commencement in post in May 22, The Trust began to report a significant increase in compliance scores for this module. As shown in the graph below the Trust continued to maintain and report a positive trajectory to hand hygiene training for clinical and non clinical staff throughout the year. Will continues to support clinical areas in leading on their hand hygiene competencies to maintain excellent compliance to our high standards.

**Criterion 2: Provide and maintain a clean and appropriate environment**

The Trust understands the importance of a clean, appropriate environment and focuses on providing excellent outcomes.

**Cleanliness**

Cleaning is provided by the Trust’s in-house team of cleaners and deep cleaners; the internal team is supported by external window cleaners and pest control operatives. Cleaning staff are allocated to their own area, giving them ownership of the standard; the number of hours for each area is determined by the Credits for Cleaning information system, with further input from local stakeholders, on a risk adjusted basis.

Following a successful business case, which included a review of current standards and practices in line with NHSE/I action plans, a benchmarking exercise with reference peer Trusts and an options appraisal, in December 2022 ward housekeepers were introduced to the Trust. A hybrid role, new to RJAH, these staff professionally report to facilities and have been seen as a key enabler to maintaining a tidy clinical environment which facilitates effective cleaning. In addition to ward housekeepers, investment in the deep cleaning Patient Environment Action Team (PEAT) afforded 2 additional members of staff, with the team now covering 7am – midnight, supporting cleanliness technicians with enhanced cleaning, ad hoc response and periodic equipment cleaning.

Outcomes for cleaning continued to be monitored internally throughout the year. External and patient led monitoring, including PLACE assessment, returned following a National pause of assessments during the pandemic.

**Cleanliness – Deep Cleaning**

Whilst routine cleaning is completed in all areas on a daily basis, staff in high-risk areas are supported with extra staff to complete a deep clean on a weekly basis. In the very high-risk area of theatres there is a rolling deep clean programme that runs alongside the routine clean; cleaning in these areas is completed over night, when the theatres are not in use, to provide the most effective service.

The Trust recognises the potential need to employ the use of technologies such as hydrogen peroxide vapour for the fogging of facilities and equipment in certain circumstances, as specified by the Infection Control Policy, room cleaning is completed as below:

* Green – Standard daily clean using detergent
* Amber – Terminal clean using 1000 ppm Chlorine Based Agent
* Red – Terminal clean using 1000 ppm Chlorine Based Agent followed by HPV fogging

This protocol has ensured that there are no delays in the provision of enhanced cleaning whilst clinical sign off is sought.

The Trust employed an external contractor to complete HPV fogging; responses to date have been quick, effective, and professional.

29 individual rooms and 1 complete bay and a full ward have required a red terminal clean in 2022/23; in each case a stringent process of isolation is undertaken by the estates team alongside a physical clean of the environment and equipment prior to completion. This represents a significant increase from 2021/22 (130%); with all red cleans this year being performed on MCSI – the Trust is now undertaking a review of options to ensure this enhanced cleaning remains fit for purpose, supported by both the Decontamination Group & IPC Working Group.

**Cleanliness – Internal Monitoring**

The Housekeeping Department has devised an effective sign-off sheet that allows staff to easily demonstrate the work they have completed and alert the next person on shift to any outstanding requirements. Evidence of cleaning is retained by the department and is validated by supervisor monitoring and managerial spot checks.

Internal monitoring is carried out every day, visiting all areas on a rolling programme according to their risk. All cleanliness matters are issued within 24 hours to the relevant team, assurance is provided in relation to resolution through signed off completion. All required improvements identified by the audits are acted upon by the internal team and the results are reported to the Infection Prevention & Control Committee on a quarterly basis, with specific action plans or failure themes managed through the Infection Prevention & Control Working Group.

The Trust has a risk based national cleanliness target of 85%, internally the Trust has set a 94% target, for the year 2022/23 the Trust achieved an average score of 97.85%.

**National Standards of Cleanliness 2021**

The National Standards of Healthcare Cleanliness were published in May 2021, and following a collaborative implementation process, launched at the Trust in April 2022.

**Cleanliness and Environment - Kitchen**

The Trust kitchen retained its 5-star food hygiene rating at last inspection in November 2022, which in particular, called out the high standards of cleanliness within the Trust kitchens and maintenance of assurance records in line with HACCP principles.

Recommendations highlighted as part of the 2022 inspection included structural improvements within the kitchen – this was escalated through IPC working group for funding, which was approved in January 2023.

The onsite nursery is registered with Shropshire Council environmental health, and retained its 5-star food hygiene rating in June 2022.

**CQC Inpatient Survey**

The CQC Inpatient Survey 2022 results were published in September 2022, with the Trust scoring top in the country under the metric ‘how clean was the hospital room or ward that you were in’ with an average score of 98.87%. The consistently good results achieved through this survey are a testament to the dedication and exacting standards shown by the entire housekeeping team.

**PLACE – Patient Led Assessment of the Care Environment**

In 2022, the National PLACE assessment programme was reinstated following a pause in inspections during the pandemic.

PLACE captures responses to questions on cleanliness; food; privacy, dignity and wellbeing; condition, appearance and maintenance; dementia and disability. Each year questions are updated/added to reflect what is deemed as best practice – therefore careful consideration must be given when making any comparison to previous years responses, however this patient led assessment provides vital insight into the patient’s perspective of the environment.

|  |  |  |  |
| --- | --- | --- | --- |
| Domain | 2022 Score | Status since last assessment | 2022 National Average |
| Cleanliness | 99.91% | **→** | 98.0% |
| Food | 93.85% | **↓** | 90.2% |
| Privacy, Dignity & Wellbeing | 92.38% | **↓** | 86.1% |
| Condition, Appearance & Maintenance | 99.04% | **↑** | 95.8% |
| Dementia | 83.11% | **↓** | 80.6% |
| Disability | 83.21% | **↓** | 82.5% |

**Cleaning Standards – Triangulation of Audits**

Trust audits have been consistently providing assurance internally that a high standard of cleanliness is maintained. Whilst these audits provide the core information for assurance, confidence in the internal audit is bolstered by the triangulation of external review, including the CQC inpatient survey (the largest survey relating to the patient perspective of hospital standards) and PLACE (a survey led by patients).

All information from independently gathered reviews of cleanliness point to a high assurance of cleanliness in the Trust.

**Linen**

Quarterly review meetings continued to ensure standards relating to the provision of linen were monitored.

Linen services are provided by an alternative external supplier, who continues to provide assurance to the infection control working group through monthly compliance reporting against National Guidance standards.

In May 2022, an on-site audit of the linen contractor was undertaken, attended by both facilities and IPC colleagues from across the consortium.

The contractor was able to provide assurance of the decontamination process of linen, in line with National Guidance, however concerns were raised regarding the cleanliness of the working environment, and some basic infection prevention protocols, including adequate access to hand hygiene facilities.

A formal audit report was issued on behalf of the consortium, and actions monitored through infection prevention & control working group, with a re audit in September 2022 providing comprehensive assurances that actions had been resolved, and further evidence of ongoing improvements and monitoring shared. The Trust will continue to undertake annual on-site reviews as part of its contract management process.

**Clinical Waste**

Quarterly review meetings continued to ensure standards relating to the provision of clinical waste were monitored.

Clinical waste services are provided by an alternative external supplier. Assurance this waste is being managed, both at Trust level and by the external contractor, in line with National Guidance is provided to the infection control working group though annual pre acceptance audits.

In line with NHS England requirements, the Trust has continued to work collaboratively with all waste contractors servicing the site to ensure the ability to flex to relevant pandemic guidance and changes in activity has been maintained.

**Estates Department Contribution to the Clean and Appropriate Work Environment**

Estates department activity is essential in delivering the IPC agenda, it is delivered under the principles outlined in National Guidance, which covers the importance of a clean, safe environment for all aspects of healthcare.

Matters of Estate that impact the clean environment are escalated through the IPC working group for prioritisation and oversight. This year, projects have included:

* Refurbishment of heavy workshop including creation of dedicated clean wheelchair store.
* Completion of the installation of bay doors across the Trust (facilitating the ability to adequately cohort patients in any ward)
* Refurbishment of ultrasound rooms
* Refurbishment of cleaning cupboards across the Trust
* Refurbishment of children’s outpatients clinic rooms
* Full refurbishment of Clwyd ward, completion of ongoing refurbishment of Powys ward
* Various wall and corner protection works across the Trust

**Water**

The control of water is a legal requirement; the Estates Deparmtent work to National Guidance to mitigate risks from exposure to legionella.

The Estates department continues to employ a third-party contractor to provide technical advice for water services and undertake water risk assessments on Trust properties every two years, or where required following incidents or significant infrastructure changes.

There is a written site-specific scheme of control for each inpatient premises. Eurofins provide the Trust an internet-based water testing database storage and reporting for statutory test results. There is also a three-monthly review of test results, control measures and procedures at the Water Safety Group to ensure compliance with current legislation and these results are published at the Infection Prevention Control Working Group.

In line with National Guidance. The Trust has an Authorising Engineer for Water AE (W), appointed in writing. The AE(W) is a ‘independent advisor,’ who offers technical advice to the Estates Engineers, auditing the management of water safety and increasing the Trust’s resilience and bolsters the management of water hygiene.

The Estates Department continually undertake water tests throughout the Trust estate. This water testing is carried out in line with legislation and guidance. Testing is standard practice at RJAH to ensure robust control of waterborne infections such as legionellosis; it is a method of using qualitative data to measure that our planned maintenance is successfully controlling growth of microorganisms in the potable water supply. The Trust conducts Water sample tests, at a greater frequency than required by guidance; the purpose of which is to identify potential issues sooner so that corrective actions can be implemented at the earliest possible time.

In response to out of parameter results, the mechanical team within the Estates department continue to employ an effective method of thermal disinfection. This process increases efficacy and reduces costs because of the in-house delivery of such works. Disinfection is often employed to manage domestic water hygiene.

The Trust is therefore assured that the Water Safety of the site is compliant in-line with current Legislations and guidance.

**Ventilation**

It is a legal requirement to provide adequate Ventilation in enclosed areas of a workplace.

Ventilation is led and monitored by the Estates Department, supported by an Authorising Engineer for Ventilation AE(V), appointed in writing. The AE(V) is a ‘independent advisor,’ a requirement of National Guidance and offers technical advice to the Trust, auditing the Specialised Ventilation and increasing the Trust’s resilience.

The Trust conducts monthly air velocity tests, at a greater frequency than required by guidance; the purpose of which is to identify potential issues sooner so that corrective actions can be implemented at the earliest possible time.

The RJAH Estates team conduct Quarterly PPM’s on all Air Handling units (AHU’s) to ensure they are clean, fully functional, and proactively manage any issues that should arise.

Accredited third party contractors revalidates theatres on an annual basis, providing an inspection and reverification report. These reports are then reviewed by the Trusts Authorising Person (AP(V) and the AE(V)

The Trust is therefore assured that the sites Ventilation Systems are compliant in-line with current Legislations and guidance.

**Decontamination Group**

Decontamination, which covers the theatre and sterile services environment, is led and monitored by the Estates department supported by their third party accredited Authorising Engineer for Decontamination AE(D), who is appointed in writing. The AE(D) is a ‘independent advisor,’ a requirement of National Guidance who offers technical advice to the Trust, auditing the Decontamination equipment and increasing the Trust’s resilience.

The RJAH Estates team maintain a local testing regime of Decontamination equipment on a monthly basis and proactively manage any issues that should arise. Reports are produced for Quarterly and Annual Testing. These reports are then reviewed by the Trusts Authorising Person (AP(D) and the AE(D)

The Trust is therefore assured that the Decontamination of Theatre Surgical equipment is compliant in-line with current Legislations and guidance.

**Personal Protective Equipment (PPE)**

The department took responsibility for control of PPE, to ensure the Trust benefited from sufficient stock of appropriate PPE; responsibilities included:

* Management of Trust stock through the National PUSH model and consideration of mutual aid requests to support the wider region.
* Installation of PPE stations across site & daily top up service of these, alongside ensuring adequate PPE is available at point of care for clinical teams.
* Provision of FFP3 fit testing & supporting clinical teams to ensure staff are protected with masks in line with the most up to date guidance.

**Enhanced Cleaning**

National SOPs for cleaning in line with risk level were stood down, although the Trust continued to utilise these checklists for cleaning in cases of COVID outbreaks.

Successful business cases supported the continued provision of touch point cleaning throughout public areas, with the Trust recognising that the National Standards for Healthcare Cleanliness recommended increased frequency of cleaning these as a business-as-usual task. Work schedules for this team incorporated supporting a second daily clean for isolation rooms, as specified by the National Infection Prevention & Control Manual.

**IPC Related Estates & Facilities Improvements**

Following substantial works completed in 2021/22, focus shifted this year to ensuring estates and facilities processes were aligned to the IPC governance framework, and that appropriate escalation routes were in place to identify where clinical environments fell below expected standards.

Continued collaboration, through the IPC working group, has facilitated further refurbishments, promoted respect in subject specialists, and fostered an open and honest approach to auditing and inspection where teams are proud to be held to account.

During a year where the Trust has learned many lessons, in relation to maintaining an evolving environment in a clean and safe manner, learnings have been passed on to our ICS partners via process sharing, site visits and regular catch ups.

Moving into 2023/24, an emphasis on ensuring processes are efficient and sustainable.

**Criterion 3: Ensure appropriate antimicrobial use to optimise patient outcomes and to reduce the risk of adverse events and antimicrobial resistance**

Antimicrobial Stewardship (AMS)

The Trust antimicrobial management group (AMG) comprised representatives from pharmacy, microbiology, nursing and medical staff. This group managed and formulated policy with regard to antimicrobial stewardship, and responded to concerns in this area. Attendance was a challenge to the group and following agreement at Committee, antimicrobial stewardship is now embedded as a standing agenda item of the monthly Drug and Therapuetics Committee to ensure the right representation and to avoid duplication of meetings. The group’s responsibility includes monitoring antimicrobial prescribing and usage, feeding back actions and concerns to the Executive Board through a quarterly AMS report to the Infection Prevention and Control Committee.

CQUIN 2022/2023

The CQUIN SCHEME for 2022/23 included an antimicrobial target regarding urinary tract infection recognition, treatment and management. Pharmacists were tasked with completing a rolling audit which included proactively influencing prescribing and retrospective data collection to ensure quality and activities around antimicrobial stewardship were achieved. The Trust achieved the CQUIN target with significant improvement in prescribing during the final two quarters of 2022/23.

A graph of a number of people

Description automatically generated

**A screenshot of a computer

Description automatically generated**

**Criterion 4: Provide suitable accurate information on infections to service users**

**Communication Programme**

The Trust has a dedicated Communication Team. The IPC team informs the Communications Team, via email, of all outbreaks. Where these may result in media interest because of the nature or impact of the outbreak, the Communications Team is invited to meetings to provide support and guidance and to prepare proactive and reactive media statements.

In the past 12 months The IPC and Communications Teams have worked together to:

* Promote IPC events by providing online flyers
* Facilitate updated national guidance messages to staff
* Collate and disseminate a Trust wide bi-monthly IPC Bulletin
* Issue media statements during outbreaks.
* Support the annual campaigns such as Hand Hygiene day

**IPC Bulletin**

In May 22 the IPC bulletin was introduced to provide effective communication to staff. The bulletin is managed by the Communications team but led by the Chief Nurse and Chief medical Officer. Content is provided bi-monthly by both IPC and executive level teams.

The bulletin became an essential communication tool throughout the transition of improvements undertaken during the year. It features a spotlight of the week for areas of good practice and specific IPC focus.

**Trust Website and Information Leaflets**

The Trust webpage continued to be reviewed and improved following its redesign in February 2022. The page now provides information to patients and visitors informing them of the required IPC precautions, aligned to national guidance.

The webpage will continues to be updated by the Communications Team in collaboration with IPC as new information becomes available.

IPC now has a dedicated intranet page whereby the newly appointed IPC Administrator/Support Secretary takes lead on the design, upload and update of content.

**Medical Illustration Team**

The IPC team have strong links to the Medical Illustration team who have provided much help and support this year to enable us to deliver key information to staff and patients. Examples include:

* Bare below the elbow posters
* COVID-19 related information
* Outbreak signage
* Re-branding logos
* Driver diagram design

We continue to be supported by the team who provide us with a prompt service; enabling us to relay information in a professional, and timely manner.

**Criterion 5: Ensure prompt identification of people who have or are at risk of developing an infection**

The IPC team perform a number of activities that minimise the risk of infection to patients, staff and visitors including advice on all aspects of infection prevention and control; education and training; audit; formulating policies and procedures; interpreting and implementing national guidance at a local level; alert organism surveillance and managing outbreaks of infection.

Oswestry Infection Control (OIC)

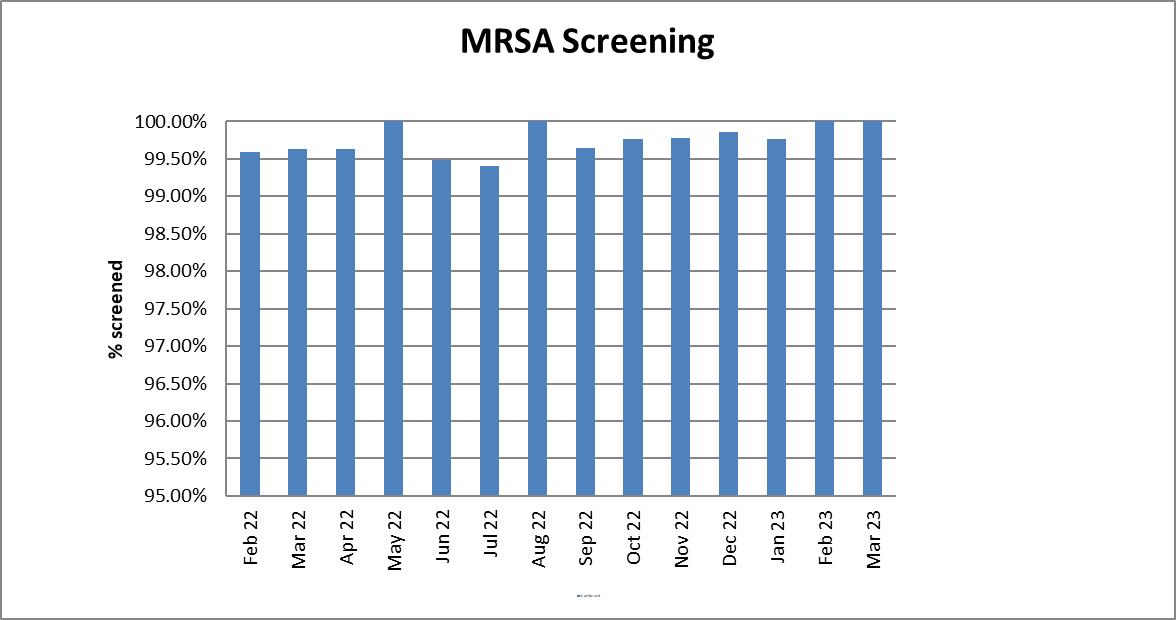
The IPC team receive a daily report (between Mon-Fri) which identifies all positive samples sent to the laboratory as part of the Oswestry Infection Control (OIC) reporting system. This system enables the IPC team to advise and support on the management of patients’ infections; including patient placement, in order to reduce risk of cross-infection.

MRSA screening

Meticillin-Resistant Staphylococcus Aureus (MRSA) is a type of bacteria that usually lives harmlessly on the skin, but if it gets into the body, it can cause serious infection that needs immediate treatment with antibiotics.

All elective surgical patients undergo screening for MRSA, and positive cases are alerted to the IPC team on a daily basis as part of the OIC reporting system. This enables prompt recognition of MRSA so that decolonisation treatment can be offered to the patient; preventing potential postponements of surgery.

The graph and table below demonstrates the MRSA screening compliance which is consistently above 99%, set against a Trust target of 100%.





Surgical Site Infection Surveillance Service (SSISS)

Infections acquired in hospital are recognised as being associated with significant morbidity. They can result in extended length of hospital stay, pain, discomfort and sometimes permenant disability. Infections of the surgical site account for approximately 16% of all hospital acquired infections, are estimated to double the length of post-operative stay in hospital and significantly increase the cost of care.

In April 2004, surveillance of surgical site infections (SSIs) in orthopaedic surgery became mandatory for all English NHS Trusts. RJAH submits surgical site infection data to the UK Health Security Agency (UKHSA) database on a quarterly basis.

The UK Health Security Agency (UKHSA) analyses the submitted data at quarterly intervals to identify hospitals whose SSI incidence may be high or low, enabling the Trust to benchmark against the national rate of infection.

From April 2022 – October 2022, RJAH submitted data to SSISS on total of 2961 operations – 1271 Total Hip Replacements (THR), 1056 Total Knee Replacements (TKR) and 934 Spinal surgeries was collected by the RJAH surgical site surveillance team. During this period, there have been a total of 28 SSIs reported, 15 THR, 9 TKR, and 4 spinal surgeries.

The following graphs show the breakdown in RJAH rate of surgical site infections reported to UKHSA between January 2019 and December 2022. At the time of writing this report, UKHSA have not yet reconciled SSI data for Jan-March which is why it is not shown below.

Further to an investigation into the reported rise in surgical site infections (SSI) for the July – September 22 period, outlier letters were received from UKHSA for Total Hip Replacements (THR) and Total Knee Replacements (TKR) for this period.

An investigation was instigated with a tabletop exercises undertaken 4th and 18th November 2022 looking into cause and contributory factors using OneTogether audit framework.

Procedures to prevent SSI are aimed at:

* Minimising the number of microorganisms introduced into the incision site, for example removing microorganisms that normally colonise the skin of patient, maintaining asepsis and managing air quality.
* Enhancing the patients’ defences against infection, for example by minimising tissue damage and maintaining normal body temperature during the procedure.
* Preventing the multiplication of microorganisms at the incision site, for example using prophylactic antibiotics.
* Preventing access of microorganisms into the incision site, for example postoperatively by use of a wound dressing

Pathogens that cause SSI may originate from:

• the patient’s own microbial flora present on skin and in the body

• the skin or mucous membranes of operating personnel

• the operating room environment

• instruments and equipment used during the procedure

Upon completion of the SSI investigation, no singular root cause was identified, however a number of recommendations were made, including the introduction of a skin decolonisation regime (see below) and a review of the SSI process, to improve the monitoring of SSI and prompt identification of issues. It was agreed that the OneTogether toolkit provides a structured approach to assessing standards across the patient’s surgical pathway, and it has been agreed that this will be used periodically to provide continuous cycle of assessment and improvement.

A report was presented to the IPC&C Committee in March detailing findings of the investigation and circulated to medical/surgical teams for wider learning.

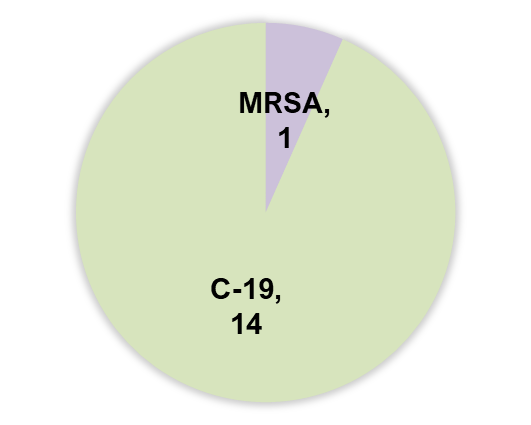
MSSA decolonisation

Meticilin- Senstive Staphylococcus Aureus (MSSA) is a bacteria commonly found living harmlessly on the skin. Through the investigation of SSI during 2021-2022, we identified MSSA as the most common micro-organism found in wounds. In response to this, and to attempt to minimise future surgical site infections, the Trust introduced an MSSA decolonisation regime for all elective patients undergoing hip, knee and spinal surgery. Since 21/11/22, patients receive a decolonisation regime pack with instructions delivered by the Pre-op Assessment Team.

Infection Multi-Disciplinary Team (MDT)

The MDT meet weekly to discuss infections and make recommendations for treatment. The Infection MDT is attended by Consultant Surgeons, a Consultant Microbiologist, an Antimicrobial Pharmacist, the Infection Prevention & Control Team, and a Consultant Radiologist.

UKHSA Surgical Site Surveillance System requirements are to report hip, knee and spinal surgery, howeverthe Infection MDT reviews patients from all orthopaedic specialities, including upper limb, lower limb, sports & spinal injuries.

**Outbreaks**

An outbreak of infection is described as two or more people with the same disease or symptoms or the same organism isolated from a diagnostic sample and are linked through a common exposure, personal characteristics, time or location. Each outbreak was investigated by a multi-disciplinary Outbreak Control Team, that reviewed all available evidence, and reported to UKHSA and the CQC.

The Trust managed a total of 15 outbreaks from April 22 – March 23:

A summary of outbreaks is tabled below:

|  |  |  |  |
| --- | --- | --- | --- |
| Dept | Month Declared | Outbreak Type | How many involved (staff and pts) |
| Gladstone Ward | April 22 | COVID-19 | 2 Patients  2 Staff |
| Sheldon Ward | June 22 | COVID-19 | 1 Staff  2 Patients |
| Estates Dpt | June 22 | COVID-19 | 4 Staff |
| Kenyon Ward | July 22 | COVID-19 | 2 Staff  4 Patients |
| Powys Ward | July 22 | COVID-19 | 3 Staff |
| Gladstone Ward | July 22 | MRSA | 5 Patients |
| Admisisons | July 22 | COVID-19 | 2 Staff |
| Theatres | July 22 | COVID-19 | 2 Staff |
| Clwyd Ward | July 22 | COVID-19 | 1 Staff  3 Patients |
| Gladstone Ward | August 22 | COVID-19 | 1 Staff  2 Patients |
| Sheldon Ward | August 22 | COVID-19 | 5 Staff  5 Patients |
| Kenyon Ward | November 22 | COVID-19 | 3 Patients |
| Sheldon Ward | November 22 | COVID-19 | 1 Staff  6 Patients |
| Sheldon Ward | December 22 | COVID-19 | 8 Patients  8 Staff |
| Sheldon Ward | March 23 | COVID-19 | 2 Staff  4 Patients |

After action reviews were implemented in July 22. The reviews are structured tofind cause and contributory factors and to share lessons learned.

The reviews were led by the IPC Team in collaboration with the Matron and Ward/Departmental Manager. Feedback takes the form of a poster for areas to display. The following info graphic captures all actions and outcomes identified:

A diagram of a diagram

Description automatically generated

### **Serious Incidents/ Periods of Increased Incidence**

On 20July 2021 an outbreak of Methicillin Resistant Staphylococcus Aureus (MRSA) was declared on Wrekin ward, which met the criteria of a Serious Incident. A total of ten patients tested positive for MRSA and it has been determined with evidence of transmission that eight of these patients contracted MRSA whilst admitted under the care of RJAH. The outbreak led to the closure of the Midland Centre for Spinal Injuries Unit (MCSI) on 26 July 20210 to further admissions until 23 August 2021.

Twice-weekly outbreak meetings were held that included ICS, UKHSA and NHSE. Audits were undertaken by the IPC team which showed issues relating to cleanliness, estates, clutter, and usage of PPE; and an initial audit showed a score of 79% compliance. External audits were undertaken by NHSE and a peer review by SaTH which showed similar findings. Over a period of two months, compliance scores improved to 98.5% which reflects the hard work and collaboration between the teams to improve standards.

In May 2022 a breach of license was confirmed and Trust were to be moved to segment 3 on the single oversight framework (SOF3). Over the course of 2022/23 the Trust made significant improvements and successfully implemented actions, providing assurance that sustainable changes have been embedded across the Trust. The Trust met the objectives set by NHS England, resulting in the Trust being moved from “red” to “green” on the Infection Prevention Control risk matrix and the removal of formal undertakings. The Trust also regularly received positive feedback that the improvements have been embedded and sustained across the organisation.

Actions were identified and included:

* Review of theTrust MRSA policy
* Clear cleaning responsibilities between clinical and domestic to be defined
* Introduction of a Trustwide Improvement Plan where actions were monitored weekly to ensure oversight
* Improvements made to clinical areas such as new flooring, wall coverings, door protection, bathroom facilities, cleaning cupboards and kitchens
* Introduce groin swabbing as part of all patients medical/surgical pathways
* Immediate identification and resolution of all environmental and estates repairs
* Regular peer and external departmental audits of compliance with IPC
* IPC quality walkabout audits undertaken using the Red Amber Green rating system to determine frequency of audits dependant on the overall score
* Develop avenues to check on understanding of IPC guidance and consider different ways of disseminating information.
* Audit of MRSA decolonisation regimes
* Shared learning from outbreaks cascaded through clinical leads and ACNs

In March 2023, the Board agreed that the Committee had delivered its purpose. The dedicated committee was therefore disestablished and oversight of the residual actions, and the wider IPC agenda, were transferred back to the Quality and Safety Committee. This arrangement was to be reviewed in six months’ time, to ensure sufficient focus was still being paid to the IPC agenda

Moving forward, the focus for MCSI is on the maintenance and sustainability of the standards that have been achieved since the outbreak. The ward will continue to follow their standard auditing process; along with a programme of IPC quality assurance walks that will include collaboration with the Facilities team.

It was important that we shared the learning around the outbreak across the Trust. We were creative in the way we spread the important message that IPC is everybody’s business; which is what inspired us to hold the IPC fayre (see our key achievements). We continue to include our journey of improvement (see below graphic) in training sessions, including doctor’s inductions, HCSW sessions, orthopaedic course teaching sessions. We were able to reach a wide audience at the IPC Summit held in January, which offered attendees the opportunity to make their pleadge to infection prevention and control.

A timeline with green circles and white text

Description automatically generated

**Criterion 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.**

The following IPC modules are monitored via ESR and mandatory for staff to completed:

* Infection Control Training Clinical & Non Clinical
* Hand Hygiene
* Donning & Doffing
* Aseptic Non Touch Technique
* Cleaning for Confidence Intensive Care Units
* Cleaning for Confidence: Introduction

The IPC QMS was expanded in June to monitor the trajectory of compliance to these training modules.

Graphs below evidence the continued upward trend to the compliance of each training module throughout the year.

Additonal to the mandatory suite of IPC modules managed via ESR, the following training is delivered by the IPCN and IPC Support Worker.

* Induction training for all clinical and non-clinical staff and rotational doctors
* Hand washing assessments to clinical staff to ensure staff obtain full hand hygiene competency.
* All volunteers receive a training presentation and hand hygiene education.

The IPC team have provided a number additional of education sessions throughout the year including:

**Orthopaedic course** – The Orthopaedic/Spinal Injuries course is delivered at RJAH through Staffordshire University. As part of the programme, the IPCN provides an educational session for delegates around the importance of practising standard infection control precautions to prevent infection.

**CPE staff information leaflet** – The IPCN developed a Carbapenemase-Producing Enterobacteriacae (CPE) leaflet for staff on the Midlands Centre for Spinal Injuries (MCSI) unit in response to a period of increased incidence. This has been shared Trust-wide and is located on the Learning & Development Team’s digital displays around the Trust.

**CPE education for doctors** – The IPCN and Consultant Microbiologist gave CPE education to the medical workforce on the MCSI unit during the period of increased incidence within the unit.

**HCSW training sessions** – The IPCN has delivered several teaching sessions to Healthcare Support Workers to aid their understanding around the chain of infection and measures that we practice to ensure that pateints are cared for in a clean, safe environment. We have collaborated with the wider System and provide regular teaching sessions for HCSWs outside of the RJAH community.

**Criterion 7: Provide or secure adequate isolation facilities**

The Trust has isolation policies in place and has single side room accommodation with en-suite facilities to isolate patients when required. We learned lessons through the COVID-19 pandemic around the ability to cohort patients who were either COVID-19 positive or contacts of a positive patient; and to enable effective cohorting of patients, the Estates team fitted doors to bays around the Trust. This has improved our ability to provide a safe environment whilst mitigating some risk of cross-infection.

The Trust Isolation Policy includes a risk assessment tool which allows staff to consider individual requirements for isolation to ensure patients are managed on a case by case basis. In rare cases where there has been no side room available; the IPC team have assisted the ward area with mitigations dependent upon the organism – this is documented in a risk assessment template and kept in the patient’s notes.

**Criterion 8: Secure adequate access to laboratory support as appropriate.**

The contract for laboratory services is with Shropshire and Telford Hospitals NHS Trust (SaTH) which is fully UKAS (United Kingdom Accreditation Service) compliant under ISO 15189. The ICD is a Consultant Microbiologist at SaTH who is contracted to work at RJAH as a specialist. Medical microbiology support is provided 24 hours a day, 365 days a year.

**Criterion 9: Have and adhere to policies, designed for the individual’s care and provider organisations that will help to prevent and control infections**

A review of all IPC policies was carry out in January 2023. The IPC Team will continue to ensure all policies align to the NIPCM and will include the following steps into the IPC programme of works for 23/24:

* Step 1: Continue to assess and align all IPC Policies to the NIPCM
* Step 2: Align Quality Assurance Walks question sets to the NIPCM to provide a robust and regular monitoring system to the effectiveness of IPC audits Trustwide.

|  |  |
| --- | --- |
| Policies Reviewed/Published in 2022- 23 | |
| Cleaning & Decontamination Policy | Infection Prevention & Control Policy |
| MRSA Policy | Influenza Policy |
| Surgical Site Infection Policy | Tuberculosis Policy |
| Isolation Policy | Management of Sharps Injuries and Exposure to Blood Bourne Virus Policy |
| Hand Hygiene & Personal Protective Equipment | Carbapenemase Producing Enterobacteriaceae (CPE) |
| Coronavirus /Seasonal Respiratory Policy | Multiply Resistant Gram Negative Organisms |
| Legionella Policy | Streptococcal Infections |
| Diarrhoea and or vomiting - Management of affected patients and staff including Norovirus |  |

**Criterion 10: Providers have a system in place to manage the occupational health needs and obligations of staff in relation to infection.**

TP Health Occupational Health & Employee Well-Being

TP Health is committed to the protection of all Trust employees as an essential part of Infection Control policies and guidance. In line with the Health and Social Care Act and Department of Health Guidelines, TP Health have arrangements in place for assessing the immunisation status of all Trust employees as well as regularly reviewing the immunisation status of existing healthcare workers and providing vaccinations as necessary and in accordance with the Green Book and Joint Committee on Vaccination and Immunisation to reduce the risk and spread of vaccine-preventable disease. There are currently two days per week at RJAH of Occupational Health clinics, which are mainly filled with new starter immunisations. RJAH are able to utilise the OH facility at SaTH for convenience.

Blood Borne Virus Exposure

Blood borne virus exposure incidents or injuries may represent a significant risk to staff working in healthcare environments. Under Health and Safety Legislation, TP Health work collaboratively with the Trust to ensure their responsibility for the health and safety of staff in relation to preventing, reducing, and controlling the risks of healthcare associated infection and management of occupational exposure to blood borne viruses and post exposure prophylaxis. TP Health are responsible for the assessment and follow up of all blood borne virus exposure incidents occurring during departmental opening hours and for the follow up of those exposure incidents occurring out of hours in emergency departments.Between April 2022 to March 2023 exposure incidents reported to TP Health was a total of 18 incidents. Of these 18 incidents, 13 of these were percutaneous.

Flu Campaign 2022/2023

This year’s flu campaign was led by the Trust Medicines Management Lead Nurse. Staff uptake was lower than expected this year at 56.9%, however this low uptake was reflected nationally. Drive for COVID-19 vaccinations were throught to be a contributory factor to the low uptake figures.

**Moving Forward**

Our drivers (mentioned in our key achievements) have led us to create structure to our ambitions (see below graphic) which will be monitored through the IPC Team annual plan:

**Integrated Working** – we will collaborate with other providers across the System to consolidate our approach to IPC

**Education and Training** – we will innovate our approach to IPC educations and training by empowering staff to check and challenge IPC practices. We will engage staff with national IPC initiatives and campaigns

**Digital Technology** – We will introduce technology to enhance our surveillance of Alert organisms

**Enhanced Engagement and Involvement** – We will innovate and revise IPC data collection, analysis and reporting to improve all staff understanding of IPC quality metrics.

A chart of information on a website

Description automatically generated

**Conclusion**

This year has continued to be challenging as we have worked through our improvement journey. However, we have embraced this extraordinary challenge and are proud to be able to demonstrate our collaborative approach across the Trust. The IPC Team are excited to move into the next year with a more proactive approach to the prevention and control of infection, in line with our vision of a zero tolerance approach to noscomial infections. Over the last year the IPC has grown, and with increased visibility around the Trust and our passion to help our staff provide the highest levels of patient care, we are seeing increased ownership and engagement.

We are committed to our vision and look forward to moving back into ‘business as usual’ approach after the COVID-19 pandemic, with a focus on sustaining and further improving the standards we have reached.

We would like to express thanks to all of the hard working, committed RJAH family for embracing this journey with us, and very much look forward to celebrating our sustained improvements throughout the next year.

Samantha Young Director of Infection Prevention and Control (DIPC)

Anna Morris Clinical Lead for Infection Prevention & Control

Hayley Gingell IPC Assurance Lead

June 2023