

Trust Board (Public)	Item: Infection Prevention & Control Annual Report
Date: November 2021	Enclosure: K
Purpose of the Report: The Trust Board are provided with the Annual Report of Infection Prevention & Control 2020/21 to: <ul style="list-style-type: none"> • Provide assurance of the Trusts compliance with the Health and Social Care Act 2008 (DH, 2015) during 2020/21 • To keep the Trust Board informed of Infection Prevention & Control performance over the year. This is in addition to the key infection control performance measures which are reported through the Trust governance framework at each Trust Board meeting • To highlight the aspects of good performance in the previous year, with regards to infection control and areas for further improvement • To highlight the key areas of focus for 2021/22 	
For: Information <input checked="" type="checkbox"/> Assurance <input checked="" type="checkbox"/> Discussion and input <input type="checkbox"/> Decision/approval <input type="checkbox"/>	
Sponsor (Executive Lead):	Nichola Kane Chief Nurse; Director of Infection Prevention & Control (DIPC)
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Risk Implications – Link to Assurance Framework or Corporate Risk Register:	Assurance Framework
Legal / Regulatory / Reputation Implications:	Health and Social Care Act 2008 (DH, 2015)
Link to Relevant CQC Domain: Safe <input checked="" type="checkbox"/> Effective <input type="checkbox"/> Caring <input type="checkbox"/> Responsive <input checked="" type="checkbox"/> Well Led <input checked="" type="checkbox"/>	
Link to Relevant Corporate Objective:	Corporate Objective 1
Document Previously Considered By:	Infection Prevention & Control Committee Executive Management Committee
Recommendations: Board members are requested to note the content of the report and priority areas for the coming year.	

ANNUAL REPORT
INFECTION PREVENTION & CONTROL
2020 / 2021

Living our values *every day*



1. Executive Summary

Introduction and Purpose

The Trust has a statutory responsibility to be compliant with The Health and Social Care Act 2008 (DH, 2015). A requirement of this Act is for the Board of Directors to receive an annual report from the Director of Infection Prevention and Control (DIPC). This report details Infection Prevention and Control Team (IPCT) activity from April 2020 to March 2021, with an assessment of performance against national targets for the year.

Key Points:

- There were two Trust-apportioned meticillin-resistant *Staphylococcus aureus* (MRSA) bacteraemia cases reported against the national zero tolerance. Learning points from the Post Infection Review (PIR) have been progressed.
- There were 15 HOHA and seven COHA *Clostridium difficile* toxin (CDT) cases reported in total this year, with one being classed as a lapse in care. This was considered to be a lapse in care because broad spectrum antibiotics had been given to a patient for sepsis of unknown source, outside Trust Antibiotic guidelines and without any discussion with a Microbiology Consultant. Learning from this case was taken forward.
- There were 13 Trust-apportioned meticillin-sensitive *Staphylococcus aureus* (MSSA) bacteraemia cases against no national target. This included seven in quarter four, but the cases were not in the same areas and following investigation there were no themes.
- The Trust reported 22 Trust apportioned *Escherichia coli* (*E. coli*) bacteraemia cases.
- There were 2257 cases of COVID-19 with 2024 admitted.
- There were a total of three confirmed Influenza (flu) cases this year.
- There were two confirmed Norovirus cases this year.
- There were 94 Vancomycin-resistant Enterococci (VRE) cases this year including 22 in the Intensive Care Unit (ITU).
- There were six cases of carbapenemase-producing *Enterobacteriaceae* (CPE) in the Trust this year.
- The Trust considers itself to be compliant with The Health and Social Care Act 2008 (DH, 2015).
- Hand hygiene and bare below the elbow compliance has been audited on a monthly basis by the infection control link practitioners. The Trust target for hand hygiene compliance remains at 95% (green), which 91% of areas have achieved, with just 6% out of the completed audits achieving an amber score (70 – 95%) and no areas with red scores (<70%).
- The Trust participated in the surgical site infection surveillance system (SSISS) again this year for repair of neck of femur from January to March 2021 which demonstrated a 2% infection rate, relating to one infection.

2. Infection Prevention & Control Arrangements

Table 1 Infection Prevention & Control Team (IPCT)

Fran Brooke-Pearce	CNS Infection Prevention & Control (CNS IP&C)	1.0 WTE
Shona Henderson	CNS Infection Prevention & Control (CNS IP&C)	0.6 WTE (0.4 WTE as Decontamination Lead)
Vicky Wells	Infection Control Nurse (ICN)	1.0 WTE
Nicola Pratelli	Infection Control Audit & Surveillance Nurse	11 hours per week until 05.02.21 (retired)*
Elli Demertzi	Consultant Microbiologist & Infection Control Lead Doctor	4 PAs
Sally Brittain**	Director of Infection Prevention & Control (DIPC)	

*In March the IP&C CNS put forward a business case to increase the hours of the Audit & Surveillance Nurse post which was successful. Following interviews, a new nurse is starting at 22.5 hours per week in September 2021.

** The DIPC in place for April 2020 – March 2021 has now left the Trust.

Infection Prevention & Control Committee (IPCC)

The IPCC is chaired by the DIPC. Each quarter the IPCT produce a report. Due to the COVID-19 Pandemic, from July 2020 meetings were via MS Teams.

Table 2 Attendance at the IPCC - Terms of Reference Requirements

Required	28.04.20	21.07.20	27.10.20	09.02.21
Director of Nursing/ DIPC (chair)	Meeting cancelled due to COVID-19	Present	Present	Apologies***
CNSs Infection Prevention & Control		Present	Present	Present
Consultant Microbiologist/ ICD		Present	Present	Present
Infection Control Nurse		Not required*	Not required*	Not required*
IC Audit & Surveillance Nurse		Not required*	Not required*	Post vacant
Head of Nursing		Present	Present	Apologies
Public Health England representative		Present	Present	Present
Facilities / Estates / ISS Manager		Present	Present	Present
Health & Safety Adviser		Not required*	Absent	Absent
Clinical Audit Representative		Not required*	Absent	Absent
Occupational Health Representative		Present	Present	Apologies
Matron (one to attend)		Not required*	Absent	Present
Antibiotic Pharmacist		Not required*	Absent	Absent
CSU Infection Prevention & Control Lead		Absent	Apologies**	N/A

*Not required due to COVID-19 Pandemic.

** Apologies - no longer covering us.

*** Deputy Director of Nursing chaired the meeting.

Reporting line to the Trust Board

The IPCT reports directly to the DIPC, who is the Trust Director of Nursing and Quality. The DIPC meets regularly with the Chief Executive, chairs the IPCC and the Patient Safety & Risk Committee and is a member of the Audit Committee, Quality Assurance Committee (QAC) and Serious Incident Group (SIG).

The IPCT provides reports for and presents at Patient Safety and Risk Management Committee. Monthly updates were provided for the Trust Board Report and the IPCT gave support to Business Intelligence in checking figures prior to uploading to Public Health England.

IPCT Liaison with Service Lines

Representatives from the Service Lines attend the IPCC meetings and report back at Service Level Governance Meetings.

Infection Control Support to the Wards

The IPCT continued to 'flag' new cases of infection in the patient CRS notes and to phone results through to the clinical areas, providing advice regarding management of infectious patients and any contacts. Ward rounds were only virtual and bed placement advice was provided over the phone by the IPCT and the Microbiology Consultants.

Collaborative working with Community Services/ Service Level Agreements

The IPCT continue to work with the community in the following ways:

- The Consultant Microbiologists provide Infection Control cover for Your HealthCare (Kingston), Hounslow & Richmond Community Healthcare Alliance & Royal Hospital for Neuro-disability.
- The IPCT provide infection control advice, an annual environmental infection control audit, and access to Trust policies and guidelines for Princess Alice Hospice (PAH) in Esher. The IP&C CNS was unable to carry out the audit this year due to COVID-19, however on 02.03.21 the Infection Control Nurse at PAH carried out the audit herself (having been present at previous audits) and has received feedback and guidance from the Trust CNSs.
- The IPCT have a service level agreement in place with the Private Patients Unit (on site).
- The IPCT liaise with the community Infection Control Nurses when required.
- The IPCT liaise with Public Health England (PHE) / South London Health Protection Team / North East London Commissioning Support Unit when required.

Decontamination Group

The Decontamination Lead manages the quarterly Decontamination Group meetings, which are chaired by the Lead Infection Control Doctor. The purpose of the group is to ensure that reusable medical devices are subject to robust decontamination in order that they do not pose a risk of transmission of infection. The Decontamination Group was previously accountable to the Health and Safety Committee, but this has now changed to the IPCC.

Antimicrobial Stewardship (Nichola Robinson, Antimicrobial Pharmacist)

The Antibiotic Stewardship Group continues to promote excellence in antimicrobial prescribing. This group reports to the ICCM and the Drugs and Therapeutics Group. The work completed this year includes:

- Ward rounds
 - Daily antimicrobial stewardship ward rounds including review of patients on carbapenems, antifungals, remdesivir, those with a positive blood culture or with *C. difficile*, any complex patients referred by ward pharmacists or microbiology consultants
 - Daily antimicrobial ward rounds on the Intensive Care Unit.
- Guideline updates
 - Update of The Trust Empirical Antibiotic Guidelines in July 2020
 - New Guideline developed and regularly updated for the Antimicrobial Treatment of COVID-19 patients with a bacterial co-infection
 - New Guideline developed and regularly updated for the use of remdesivir and corticosteroids in the treatment of COVID-19
 - Completed NICE GAP analyses for antimicrobials

- Consulted on the update of the Paediatric Antibiotic Guidelines
- Consulted on the update of the Neonatal Antibiotic Guidelines
- Consulted on new guidelines for the use of Interleukin 6 inhibitors for hospitalised patients with COVID-19
- Consulted on the update of The Wolverton STI Treatment Guidelines
- Collaborative working with primary care pharmacists in order to update both Richmond and Kingston GP group antimicrobial prescribing guidelines
- Reviewed Antimicrobial guidelines of Royal Hospital for Neuro-Disability
- Developed new Malaria Guidelines
- Audits
 - Audit on compliance to Trust Antibiotic Guidelines for the treatment of mild and severe pyelonephritis in adult inpatients
 - Audit on the use of procalcitonin in adult patients with COVID-19
 - Audit of antibiotic prescribing in adult patients with superadded bacterial infections in the context of COVID-19
 - Weekly antibiotic snapshot audits to determine if antibiotics are prescribed in accordance with guidelines for antibiotic choice and duration
- Out-patient Parenteral Antibiotic Therapy (OPAT)
 - An OPAT Service was set up in April 2020. All patients discharged on IV antimicrobials are reviewed at a weekly OPAT MDT
 - New OPAT guidelines including an OPAT Standard Operating Procedure and a pharmacist procedure for the supply of IV antibiotics on discharge.
 - Development of an OPAT Patient information leaflet and patient feedback form.
 - Development of an OPAT referral form and MDT from on CRS
 - Additional staff recruited for OPAT: OPAT nurse (started January 2021), OPAT Pharmacist (started October 2020). Funding was also secured for additional Microbiology Consultant PAs and Medical Consultant PAs
 - Regular monitoring of OPAT activity and outcome data
 - OPAT audit completed and presented at the Clinical Effectiveness Committee, the Trust Board, the Executive Management Committee, and the Quality Assurance Committee
- Education and Training
 - An Antimicrobial Stewardship presentation was created for incorporation into sepsis training for a wide variety of clinical staff
 - Antimicrobial stewardship teaching sessions were undertaken for doctors and pharmacists
 - Development of antimicrobial objectives for pharmacists
- Other
 - Antimicrobial stewardship meetings were undertaken regularly
 - All Antimicrobial incidents for the financial year 2019-2020 were reviewed and discussed at the Antimicrobial Stewardship meeting
 - Antibiotic usage and expenditure report for the financial year 2020-21 was reviewed and discussed at the Antimicrobial Stewardship meeting
 - Promotion of antimicrobial stewardship to patients and staff during World Antibiotic Awareness Week in November 2020
 - Completed a review of antibiotic stock on wards and the emergency drug cupboard
 - Participation in *C. difficile* post infection reviews
 - Review of the antimicrobial formulary to bring it in line with SWL
 - Update of the CRS quinolone safety alert in view of the recent MHRA alert

The Antibiotic CQUIN 2020/21 was on hold by PHE due to the pressures with COVID 19.

3. **Targets and outcomes**

The Health and Social Care Act 2008 (DH, 2015) provides Trusts with a code of practice for the prevention and control of healthcare associated infections (HCAIs) and makes clear their statutory responsibilities. Each Trust is expected to have sufficient systems in place to apply evidence-based protocols and to comply with the relevant provisions of the document so as to minimise risk of infection to patients, staff, and visitors. The Trust considers itself to be compliant with this document.

Care Quality Commission (CQC)

This year the CQC has not carried out routine inspections due to COVID-19 however they have carried out some focused inspections. On 30.06.20 the Trust had an initial meeting with the CQC regarding infection prevention and control, which was followed up with a more detailed meeting on 20.07.20. The IP&C CNS took part in the meetings which were held via MS Teams. During these meetings, different areas of the board assurance framework (BAF) were discussed in relation to infection prevention and control. Eleven questions were asked, and all had a positive answer with supporting evidence supplied by the Trust.

The CQC summary record outlined that the board is assured that the trust has effective infection prevention and control measures in place and that 'the trust has undertaken a thorough assessment of infection prevention and control, across all services, since the pandemic of COVID 19 was declared'. No recommendations were made by the CQC.

IPC Peer Review 02.10.20

As part of a peer review coordinated by the Head of Nursing (Nursing Led Clinical Improvement Programmes, Patient Safety and Innovation Team) at NHS England- NHS Improvement, the IPCT and the Head of Nursing for unplanned care took part in an infection control peer review with YourHealthcare. The following areas were focussed on within the meeting:

- Learning from the Hillingdon outbreak review
- Management of patient pathways (acute, older people and community) and areas arising from the Board Assurance Framework
- Areas of positive practice for adoption and sharing
- Opportunities for the Trust to request any additional support from the CCG.

The review had a very positive outcome for the Trust, with positive feedback from those involved.

4. **Mandatory Reporting of Healthcare Associated Infections (HCAI)**

Over the past year the Trust Business Intelligence Team (BIT), following sign off by the DIPC, reported the following HCAI statistics to PHE:

- Two Meticillin-resistant *Staphylococcus aureus* (MRSA) bacteraemia rates.
- 13 Meticillin-sensitive *Staphylococcus aureus* (MSSA) bacteraemia rates.
- 15 *Clostridium difficile* toxin (CDT) HOHA and seven COHA positive infection rates.
- 22 Trust apportioned *Escherichia coli* (*E. coli*) bacteraemia rates.

Mandatory HCAI surveillance results have been reported via the quarterly report to IPCC and QIC, and to the Trust Board by the DIPC. Post Infection Reviews (PIRs) of cases have been presented to SLM and SIG in order to facilitate learning.

5. Trust Reportable Healthcare Associated Infections

Meticillin-resistant *Staphylococcus aureus* (MRSA) Bacteraemia

The total number of Trust-apportioned MRSA bacteraemia (blood stream infection) cases for the year was two against a ceiling target of zero. Cases are deemed Trust-apportioned if the blood cultures are taken on or after the third day of admission.

The first case was admitted with symptoms and diagnosed with infective endocarditis, therefore a PIR was not required as there was no learning. In the second case the source of bacteraemia was not found, however there was some learning around documentation which was taken forward by the ward consultant and the senior sister.

Meticillin-sensitive *Staphylococcus aureus* (MSSA) Bacteraemia

There were 13 Trust-apportioned MSSA bacteraemia cases reported this year. There is no national benchmark or annual threshold set for MSSA bacteraemia rates. Due to COVID-19 this year no PIR's were carried out on MSSA bacteraemia cases as this is not mandatory. However, it was noted that in quarter three there were seven cases and therefore a quick look exercise took place which demonstrated no themes, and the cases were in different areas. Out of the seven there was one case that could have been due to a cannula site, however VIP scores recorded the previous day were zero and the device was removed as soon as redness had appeared around the site.

***Clostridium difficile* Toxin (CDT)**

Cases continue to be assigned as follows:

- Hospital Onset Healthcare Associated (HOHA): cases that are detected in the hospital two or more days after admission;
- Community Onset Healthcare Associated (COHA): cases that occur in the community (or within two days of admission) when the patient has been an inpatient in the trust reporting the case in the previous four weeks;
- Community Onset Indeterminate Association (COIA): cases that occur in the community (or within two days of admission) when the patient has been an inpatient in the trust reporting the case in the previous 12 weeks but not the most recent four weeks;
- Community Onset Community Associated (COCA): cases that occur in the community (or within two days of admission) when the patient has not been an inpatient in the trust reporting the case in the previous 12 weeks.

There were 15 hospital onset healthcare associated (HOHA) *Clostridium difficile* toxin positive cases this year and seven community onset healthcare associated (COHA) cases. PIR was carried out on all HOHA cases.

There was one lapse in care due to inappropriate antibiotic prescribing. Broad spectrum antibiotics had been given to a patient for sepsis of unknown source, and this was outside the Trust antibiotic guidelines. There was also no discussion with a Microbiology Consultant regarding antibiotics. An action plan was put into place and learning from this case has been taken forward.

Gram-negative Blood Stream Infections

In 2017 the Secretary of State for Health launched an important ambition to reduce healthcare associated Gram-negative bloodstream infections by 50% by 2021 (NHS Improvement 2017). The initiative started with *E. coli* bacteraemias, and this was then extended to include *Pseudomonas aeruginosa* and *Klebsiella species*. However, it was previously acknowledged that this would be unachievable, and the timespan was increased. The most recent government paper (DH 2019)

outlining the UK's five-year national action plan (2019–2024) for tackling antimicrobial resistance with reference to the planned 20-year vision includes the following targets, to:

- Halve healthcare associated Gram-negative blood stream infections;
- Reduce the number of specific drug-resistant infections in people by 10% by 2025;
- Reduce UK antimicrobial use in humans by 15% by 2024;
- Reduce UK antibiotic use in food-producing animals by 25% between 2016 and 2020 and define new objectives by 2021 for 2025; and
- Be able to report on the percentage of prescriptions supported by a diagnostic test or decision support tool by 2024.

This year the Trust reported 22 Trust apportioned *Escherichia coli* (*E. coli*) bacteraemia cases, a slight rise from the 18 cases reported last year, but less than the 26 reported in 2018-19.

There were 20 *Klebsiella species* bacteraemia cases (eight last year); and one *Pseudomonas aeruginosa* bacteraemia case (the same as last year).

6.0 Outbreaks and Incidents

Norovirus

There were two confirmed cases of norovirus this year.

Influenza (Flu)

The total number of flu cases this year was three. Flu point of care testing (POCT) was not used this year due to COVID-19.

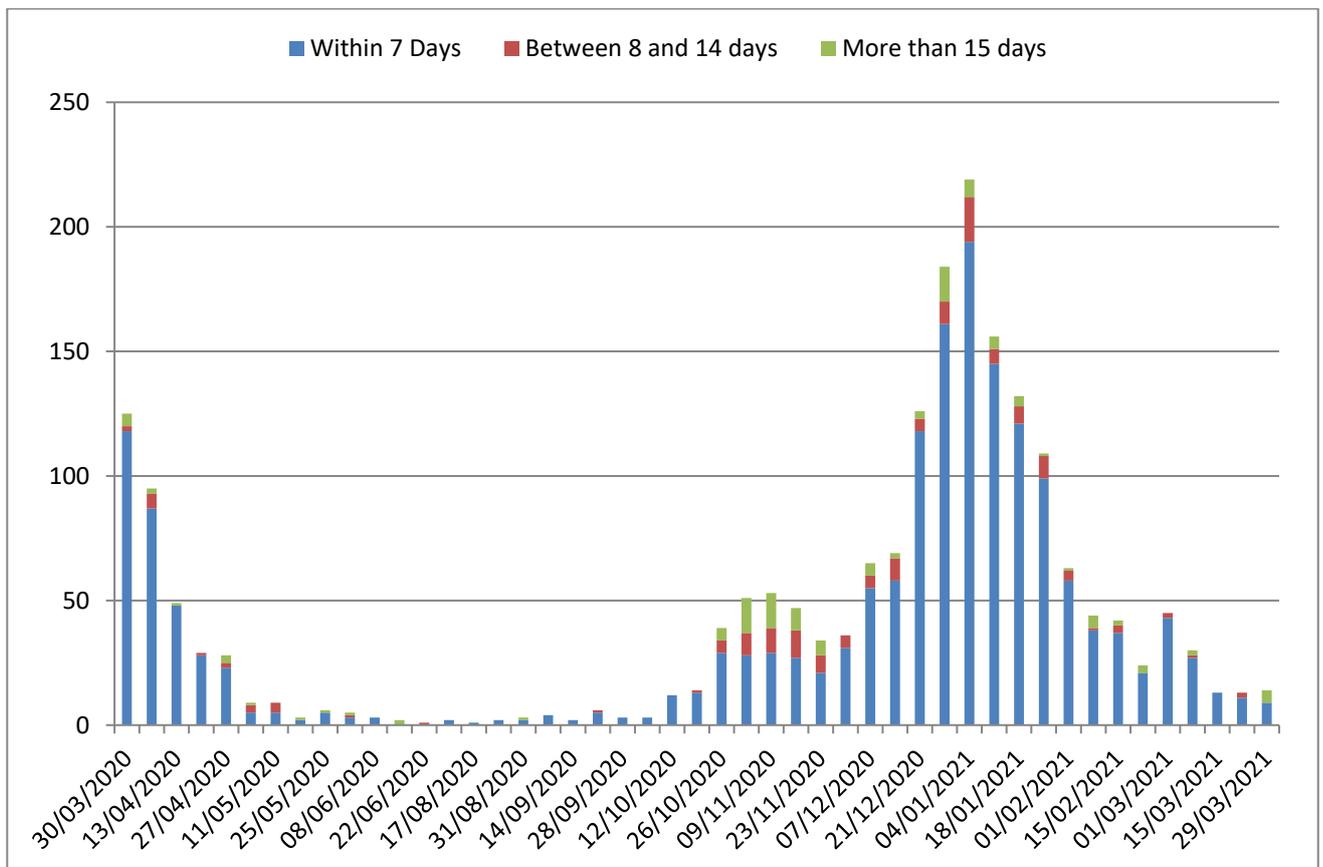
Back in January 2020 the IPCT had their first query from ED regarding a possible Wuhan novel coronavirus case (now referred to as COVID-19). The Trust started testing patients on 29.01.20 and the first positive test was taken on the 08.03.20 from a non-admitted patient tested in the COVID-19 testing POD on site. The first positive case in the Trust was admitted on the 08.03.20 and tested positive on the 13.03.20. A number of actions took place in the Trust in preparation for the pandemic from January 2020 until April 2020 and these are documented in last year's Annual Report.

Graph 1 COVID-19 Admitted positive cases from week beginning 30.03.20 to week beginning 29.03.21 (2024 cases in total)

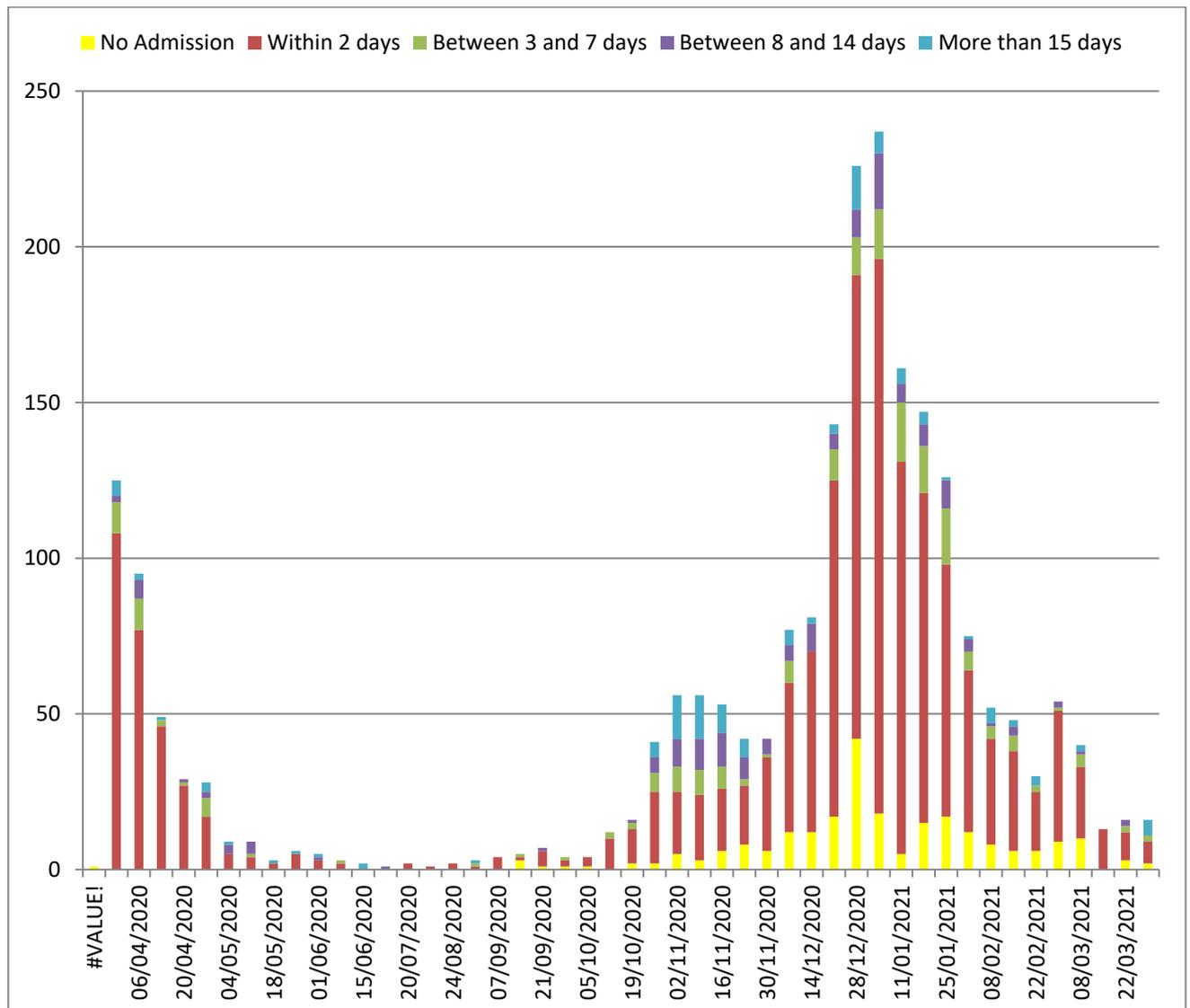
Hospital acquired COVID-19

HOPHA (between 8 & 14 days): 150

HOHA (15 days or more): 125



Graph 2 COVID-19 All positive cases from week beginning 30.03.20 to week beginning 29.03.21 (2257 cases in total)



In April 2020 the Trust was still in the first wave which had reached the peak in March 2020 and started tailing off at the beginning of May 2020. The second wave started at the beginning of October 2020 and reached the peak at the end of December 2020, with numbers reducing significantly in March 2021.

Throughout the pandemic the Infection Control Doctor was a member of the Trust Clinical Advisory Group (CAG); the Response Team; the Elective Surgery Implementation Group and subsequently the Covid resurge Group.

During 2020 – 2021 the IPCT:

- Continued to follow updated guidance from PHE, providing advice to staff regarding PPE, infection prevention and control precautions for COVID-19 and non-COVID-19 patients and transmission prevention measures.
- Regularly updated the Trust Infection Control Guideline for COVID-19.
- Completed and updated the new Board Assurance Framework (BAF), a document from NHS England/ NHS Improvement (04.05.20) for supporting healthcare providers to effectively self-assess their compliance with Public Health England (PHE) and other COVID-19-related

infection prevention and control guidance and to identify risks. Although not compulsory the Trust has completed and updated this document regularly and viewed it at Trust Board.

- Responded to questions and queries regarding COVID-19 and supplied written and verbal information to staff.
- Liaised with the Trust communications team to ensure up to date information was communicated to staff.
- Maintained the infection control COVID-19 spread sheet, identifying Hospital Onset Healthcare Associated (HOHA) cases (more than 15 days) and Hospital Onset Potential Healthcare Associated (HOPHA) cases (between eight and 14 days). Recorded vaccination status and presence of symptoms.
- Completed PIR on deaths associated with COVID-19 cases relating to HOHA and HOPHA cases.
- Developed an infection prevention & control footprint within the Unplanned / COVID-19 Risk Managed pathway with three distinct zones in the Trust: Red for COVID-19 test positive / symptomatic / known contacts; Amber for those asymptomatic but awaiting swab results; Green for test negative, asymptomatic and with no exposure; Super Green for those self-isolated and test negative prior to their procedure (COVID-19 Protected pathway).
- Added a day three swab in quarter three for all patients who had tested negative on their admission swab as well as on day five to seven. This was in order to identify patients incubating COVID-19 more quickly. Patients are now swabbed on admission, at day three, again at day five to seven and then only if they become symptomatic or are a contact of a positive patient.
- Carried out an audit to ensure that correct screening had been completed for COVID-19 negative patients and contacts of positive cases. Results demonstrated good compliance generally with some areas missing some patient screens, and these areas were informed. Following this, ward staff carried out their own COVID-19 screening audits with results reported to the Heads of Nursing and the IPCT. This continues to be audited on a monthly basis.
- Contributed to the development of many COVID-19 Standard Operating Procedures (SOPs) including:
 - Theatre Department Emergency Surgery COVID-19 Risk Management Pathway;
 - Low Risk Pathway COVID-19 Screening Guidelines for Surgery;
 - SOP for Theatres;
 - ITU COVID-19 outbreak and recovery phases;
 - Testing for COVID-19.
 - Infection Control Initiatives for Preventing the Spread of Infection;
 - COVID-19 Outbreak escalation; Patient Flow Chart ED to Medical wards;
 - Emergency Surgery COVID-19 Risk Managed Pathway;
 - COVID-19 Screening Protocol for the Elective Surgery Low Risk Pathway and COVID-19 Recovery;
 - Home Visits;
 - Patient POD Swabbing;
 - Mitigation to Minimise the Risk of COVID-19 Transmission in Outpatient areas;
 - Taking a Combined Nose and Throat Swab for COVID-19;
 - Discrepant Patient Temperature Readings via Touch-free Infra-red Thermometers;
 - PPE and AGPs;
 - Proposal to Re-start Day Case Pleural Procedure Clinic COVID-19 Protected Pathway (Super green patients);
 - Elective Theatre Cases in COVID-19 Protected Pathway.
 - Rapid COVID-19 Testing (Biofire) Process for the wards / Rapid COVID-19 Testing (Biofire) Process for ED Admissions;
 - Clinically Suspected COVID-19 Process;
 - COVID-19 Contact Bed Management Process;
 - Patient Flowchart ED-Medical wards;
 - ACU Patients (Super Green pathway) and Ambulatory Gynae Patients (Amber pathway) in the DSU Endoscopy area and Ward D;
 - Zones within the Emergency Department;
 - Patient by Type – Screening Pathway;

- Infection Control Isolation, PPE, Ventilation and Cleaning Requirements in the Recovery Phase;
- COVID-19: Stepping-down Isolation Precautions for Inpatients;
- Kingston Hospital Maternity and Neonatal SOP for Managing COVID-19;
- Outpatient Service Reinstatement and Algorithm;
- Guidance for COVID-19 Recovered Patients being Screened and Assessed for Elective Procedures;
- Referral Process and Patient Flow for Patients Undergoing Elective Surgery Requiring Close Monitoring;
- COVID-19 Step-down;
- Staff COVID-19 Outbreak Procedure and development of an algorithm;
- ED COVID-19 Zoning;
- COVID-19 SOP for NNU;
- Gynae and ACU SOP;
- Trust Visiting Plan;
- Recovery in Endoscopy – Dual Pathway.
- Were involved in the Trust recovery phase by participating in hospital ‘walk-rounds’ and providing advice on required infection control measures in order to resume activity.
- Completed/ assisted with risk assessments for the following:
 - Service resumption for surgery, OPD, and visiting;
 - Visor use for those caring for lip readers and children;
 - ENT service and aerosol-generating procedures;
 - Colposcopy clinic PPE use;
 - Medical device decontamination;
 - Decontamination of phones and tablets;
 - Ventilator decontamination;
 - PPE and clinical pathways in endoscopy.
- Completed ward rounds three times a week during November and December 2020. Provided advice on isolation requirements for COVID-19 positive patients and their contacts and attended bed meetings. During January 2021 the IP&C CNSs completed ward rounds every day (including weekends) and presented a complete handover of COVID-19 patient status (and other infections) to Silver Command by midday each day. During February 2021 this continued every day (without weekend cover), and handover at Silver command was gradually withdrawn in March 2021 as case numbers reduced. The IPCT continued to carry out ward rounds two to three times a week following this and liaised with bed managers / matrons where required.
- Flagged all COVID-19 positive, indeterminate, and contact cases in patient notes on CRS.
- Maintained records of all COVID-19 swab results.
- Contact traced all positive and indeterminate cases from June 2020; flagged the notes of all contacts on CRS and phoned the wards to ensure isolation was in place. Informed contacts that had since been discharged home and provided advice regarding to self-isolation. During the second peak the team were helped with contact tracing by a full-time bank PA and two part time re-deployment nurses.
- Visited the wards to provide advice and ensure that good infection control practices were in place, particularly in outbreak wards. Carried out COVID-19 Peer Reviews with the Matrons to audit environmental aspects. Assisted the matrons with PPE and hand hygiene auditing.
- Carried out mask fit testing and organised a mask fit testing team to ensure optimum availability for fit testing every weekday / some weekends, evenings and night times.
- Liaised regularly with the Trust purchasing team with regards to PPE supplies.
- Liaised regularly with the Trust Occupational Health department regarding testing of symptomatic staff and self-isolation guidelines.
- Provided infection control training for the redeployed staff and staff from ISS, Radiology, and Maternity.
- Completed/ assisted with COVID-19 related risk assessments where required.
- Attended MS teams Face to Face Meetings twice weekly to determine numbers of staff attending organised meetings and finding alternative solutions in order to maintain staff safety.

The Trust purchased two additional Biofire analysers in quarter three (bringing the total to four) in order to increase capacity of COVID-19 rapid PCR testing. This supported timely discharge of patients and correct placement of new acute admissions. Since late December there has been capacity to undertake 80 Biofire rapid tests every 24 hours. The Biofire result is ready in approximately 90 minutes.

The Trust provided kits and encouraged staff to carry out twice weekly lateral flow testing in November 2020.

From quarter three onwards in-patients have been encouraged to wear masks.

The DIPC, the Infection Control Doctor or the IP&C CNS in her absence attended the weekly South West London Infection Prevention & Control (SWL IPC) Forum, to discuss and ensure consistent advice within South West London and to share good practice and learning.

In March 2021 the Trust was invited to set up a new Hospital Contact Tracing Pilot by employing two Track and Trace Officers in collaboration with and funded by Kingston Public Health. The Track and Trace Officers work closely with the IP&C CNS at Kingston Hospital and the Local Contact Tracing Team within the Kingston Council Public Health Service. The scheme was set up initially to address the gap in contact tracing out in the community when a positive case is in hospital. The work also involves following up local positive cases and contacts of positive cases who have been discharged home to provide support regarding self-isolation, discussing welfare issues and available resources. The pilot started in May 2021 and is currently funded for 10 months. The officers carry out 21 hours of work each week in total over seven days a week.

The Trust has experienced twelve outbreaks of COVID-19 this year, nine concerning patients and three concerning staff.

COVID-19 Patient Outbreaks

Table 2 Patient Outbreaks 2020 - 2021

Ward	Onset	No. of cases	HOHA	HOPHA	HOIHA	Date closed
Blyth	28.10.20	39	19	20	-	31.01.21
Isabella (1)	01.11.20	16	8	8	-	18.11.20
Keats (1)	23.11.20	22	13	9	-	07.02.21
Hamble	13.12.20	22	6	9	7	04.03.21
Isabella (2)	17.12.21	41	7	10	24	04.03.21
Hardy	24.12.20	38	9	13	16	17.03.21
Bronte	28.12.20	22	9	5	8	04.03.21
Keats (2)	04.02.21	11	3	4	4	17.03.21
Cambridge	12.02.21	26	3	12	11	04.03.21

COVID-19 Staff Outbreaks

Estates Department Outbreak

There was an outbreak amongst staff working in the Estates department. This was formally declared on the 18.11.20. Eight members of the estates team tested positive for COVID-19. A risk assessment was carried out in the department, and it was found that PPE / social distancing requirements had been breached. Affected staff were sent home to self-isolate and contacts advised to work from home. Measures were put into place to ensure that staff working in this department understood the need comply with Trust COVID-19 policy.

Maternity

In March, PHE reported a staff member who had tested COVID-19 positive on 20.02.21. The staff member was a maternity support worker. She and her contacts were followed up. There was no relationship between the healthcare worker and the patients who tested positive 14 days before or 14 days after her onset of symptoms; all patient cases were community acquired.

Speech and language therapy team

In February, three members of the speech and language therapy team had lunch together without maintaining social distancing or wearing masks. All three subsequently tested COVID-19 positive and were managed in accordance with PHE guidance. No patients or other members of staff were exposed, as PPE use and social distancing were maintained at all other times.

Infection Prevention and Control Outbreak Measures

In addition to the actions outlined in section 4.12 the following actions were in place:

- Outbreak management and reporting in line with national requirements, including PHE attendance at outbreak meetings, advice gained from NHS London, the Head of Infection Prevention & Control for London and the SWL IPC Forum.
- Outbreak meetings, weekly with relevant staff and action plans for all affected areas.
- Continued enhanced cleaning in all wards. Isolation cleans and curtain changes completed for all areas with an outbreak.
- IPCT support on the wards.
- PPE auditing.
- Staff screening and self-isolation where required.
- Communications to staff reinforcing the infection control measures required.

Vancomycin-resistant Enterococci (VRE)

There were 94 Vancomycin-resistant Enterococci (VRE) cases this year including 22 in the Intensive Care Unit (ITU). In July there was an outbreak in ITU affecting three patients. An isolation clean and curtain change was carried out in the whole unit, and weekly hand hygiene and PPE audits and equipment spot checks were completed until there were no new cases for four weeks. The audits identified gaps in awareness of PPE and isolation following AGPs, which was addressed at the time.

Group A Streptococcus (GAS)

There were six GAS cases and one invasive GAS case this year. Cases were investigated and their contacts traced with letters being sent to discharged patients and their GPs where required.

Carbapenemase-producing Enterobacteriaceae (CPE)

There were six cases of CPE this year. All patients were isolated, had their notes flagged and contact tracing was completed with advice given regarding weekly screening of the patients and their contacts.

ITU MRSA Outbreak

In September 2020 there were three linked MRSA positive patients in ITU. Actions were put into place which included isolation clean and curtain change for whole unit and weekly PPE and hand hygiene audits that continued until mid-November. No further linked MRSA positive cases were identified.

Panton-Valentine leucocidin-MRSA (PVL-MRSA)

There were two cases of PVL-MRSA this year. One in July had an MRSA positive wound swab that was (PVL) positive. Contact tracing identified two contacts – one had died before the PVL result was known; the other screened negative for MRSA post exposure. The other case in September had an MRSA bacteraemia, which was subsequently identified as PVL positive. The patient had completed treatment and had gone home. The local Health Protection Team was informed, and the patient was followed up via the GP. Contact tracing identified two remaining inpatient contacts, and both were subsequently negative to MRSA.

Norovirus

There were two cases of norovirus this year.

There has been an on-going shortage of testing reagent at St Georges Hospital laboratory. Consequently, for most norovirus specimen requests this year the IPCT have assessed patient documentation and discarded any tests where norovirus has been unlikely.

Seasonal Flu

There were three cases of seasonal flu this year and all three were in paediatrics. The Flu point of care test (POCT) has not been used this year due to COVID-19.

Suspected endophthalmitis Royal Eye Unit

A patient developed an infection post cataract surgery in February 2021. The instrument set was withdrawn from use as soon as the incident was discovered. The set had been used on a further eight patients in the interim; none of these patients developed signs of infection post operatively. The IP&C CNS worked with the clinical team to assess the environment and adherence to infection control practices and local protocols. No issues or themes were identified. Thermocouple testing on the phaco handpiece by Steris on 12.03.21 demonstrated that the sterilisation parameters were fully met. No further action was required.

Transmission of VRE, MRSA & *Klebsiella pneumoniae* ESBL in ITU

Between December 30th, 2020, and Jan 28th, 2021, 13 patients acquired *Klebsiella pneumoniae* ESBL and/ or Vancomycin-resistant enterococci (VRE) or MRSA whilst being cared for in Main ITU/ Alex ITU. A number of contributory factors were identified:

- inappropriate usage of PPE
- immunosuppressed patients in ITU
- high usage of broad-spectrum antibiotics
- high prevalence of COVID-19 in ITU patients
- ITU staffing ratios
- redeployed staff working in an unfamiliar environment
- ITU patient ratios & volume made it challenging to apply robust IPC precautions at all times
- high bed occupancy in a clinically cramped environment
- high levels of stock required, with very little capacity for storage.

The HON for unplanned care and the IPCT carried out peer reviews and provided live feedback to the staff on duty at the time, which was well received. The subsequent action plan was shared with the ICU Senior Nursing team, with specific actions implemented by the HON Unplanned Care, supported by the IPCT. A marked improvement was noted in the condition of the environment and staff were reminded about correct FFP3 mask usage and of the availability of respirator hoods. Line managers were tasked to follow this up with relevant staff.

Multi-drug Resistant TB

A patient attended ED with a five-week history of cough and developed fever. Consultation with ED staff revealed that he did not sit in the waiting room and was treated in a cubicle therefore there was no patient exposure. All staff involved in his care wore appropriate PPE and as such there was no staff exposure.

Legionella notification

In January, a notification was received from PHE regarding a patient who was urinary antigen positive for legionella on 16.01.21. The patient had attended the haematology day unit on January 6th, 7th, 8th, 11th & 12th, was an inpatient from 17.01.21 and transferred to RMH on 19.01.21. The patient was having chemotherapy. Water testing was undertaken, and legionella was not detected. PHE were informed of the result.

7. Mask Fit Testing

The Health and Safety Executive (HSE, 2019) document INDG479 recommends that staff required to wear high level respiratory protective equipment (an FFP3 mask) for some infections and/or procedures such as TB and/or aerosol generating procedures (AGP's), should be mask fit tested to ensure that they are using a well-fitting mask in order to achieve maximum protection.

The Full Support Portacount machine continued to be used this year for mask fit testing. Mask fit testing has been available all day every weekday for the most part, including some evenings, nights, and weekends. The Infection Control Nurse trained and organised a team of bank mask fit

testers. In January 2021 the Trust was supplied with one full time fit tester from a company called Ashfield Engage and this was funded by the Government.

Priorities were initially given to key staff working in ED, AAU, Hamble ward, ITU, endoscopy, radiology and any members of staff carrying out aerosol generating procedures. Re-usable masks and hoods were made available to staff failing fit testing.

During this financial year 1840 members of staff have been fit tested.

Two Risk Assessments remain on the Trust Risk Register. One is regarding the difficulty in fit testing and passing every member of staff on every make of FFP3 mask delivered to the Trust (during the pandemic the Trust has had no choice in the make of FFP3 masks being delivered). The other covers the time when the Trust was unable to provide fit testing (20.03.20 – 28.04.20) due to a national shortage of FFP3 masks (in line with surrounding trusts masks were preserved for the clinical areas only and staff were reminded how to perform the 'fit check').

There has been a small minority of staff who have repeatedly failed the mask fit test using different types of masks. For these members of staff and for those unable to shave (for religious reasons) the Trust purchased a number of 'hoods' which are suitable for use instead of an FFP3 mask. The Trust has also tested staff on a re-usable type of mask.

8. Surveillance

Surgical Site Infection Surveillance Service (SSISS)

The Trust participated in the surgical site infection surveillance system (SSISS) again this year for repair of neck of femur from January to March 2021 which demonstrated a 2% infection rate (one infection out of 51 operations). Results from all hospitals in this surgical category for the previous five years demonstrated an infection rate of 1% (943 infections out of 90310 operations). Consequently, the Trust has been identified as an outlier and an investigation into the one identified infection is currently taking place.

9. Hand Hygiene Compliance

Hand Hygiene Audits

Hand hygiene and bare below the elbow compliance has been audited on a monthly basis by the infection control link practitioners. The Trust target for hand hygiene compliance remains at 95% (green), which 91% of areas have achieved, with just 6% out of the completed audits achieving an amber score (70 – 95%) and no areas with red scores (<70%). Please refer to Appendix 1.

Bare below the elbow (BBE)

The Trust continues to monitor compliance with the DH initiative 'Bare below the elbow' for all staff working in clinical areas. Compliance is monitored during hand hygiene audits and staff are advised to directly challenge poor practice and escalate to the DIPC / Medical Director if necessary.

10. Asepsis and Intravenous (IV) Device Care

Link Practitioner Intravenous (IV) Audit

Following identified actions from PIR and in order to ensure optimal compliance with documentation on insertion and care of IV devices, it was decided that the Link Practitioners working in clinical areas with IV devices would commence auditing on a monthly basis. The work commenced in July 2019 and replaced the Link Practitioner equipment audits which were already being covered by the Heads of Nursing and Audit and Surveillance Nurse.

The work includes making 10 observations each of insertion data documentation and care data documentation on the intravenous chart in CRS. Follow-up of non-compliant members of staff is expected. The audit was scored and RAG rated each month. Back in 2019 the initial poor scores improved in most areas however auditing has lessened since COVID-19. Scores can be seen in Appendix 2, and this work will continue.

11. Personal Protective Equipment (PPE) Audit

In June 2020 the Trust started doing PPE audits to ensure staff compliance. The audit assesses compliance with wearing the correct PPE appropriately in clinical and non-clinical areas, and that hand hygiene is performed when changing PPE in between patients. The audit tool includes asking five random members of staff a few questions regarding AGPs and the PPE required and for how long after the procedure. The audits were carried out weekly and any non-compliant staff were addressed at the time. The scores were RAG rated and shared amongst the teams by the Head of Nursing. PPE audits also formed part of the actions in outbreak management. The audits are now included in the monthly Saving Lives Audits carried out by the Link Practitioners.

12. Saving Lives Initiative / High Impact Interventions (HII)

The Infection Control Link Practitioners continue to carry out monthly audits from the DH 'Saving Lives High Impact Interventions programme (DH, 2017). This includes auditing: hand hygiene compliance; peripheral line insertion and care; urinary catheter insertion and care; isolation practices and PPE compliance. Aspects of the Saving Lives audit scores can be viewed on Nursing and Midwifery Quality Scorecard and are disseminated to the divisions via the Infection Control Quarterly Report. The ITU also carry out aspects of the HII regarding ventilator associated pneumonia / tracheostomy and central venous access devices via ICNARC (Intensive Care National Audit Research Centre).

13. Care of the Environment

Infection Control Ward Checks

The ICN and IC Audit and Surveillance Nurse have been carrying out Infection Control spot checks in clinical areas again this year, particularly in COVID-19 outbreak wards. The environment and equipment were checked, and any cleaning or maintenance actions were immediately reported through the Trust helpdesk. Support was given regarding any staff concerns and areas were re-visited where necessary to ensure compliance.

Trust Cleaning Services

ISS Mediclean continues to use a microfibre cleaning system, supplemented with Chlorclean (a chlorine-based detergent) for isolation rooms and for cleaning during an outbreak. Cleaning scores are routinely recorded as a quality indicator. Trust curtain changing guidelines are in place, with curtains dated when changed. The schedule for the rolling programme is available in each ward area as are the dates of any ad-hoc curtain changes requested by staff.

Infection Control training is given to all ISS Mediclean staff on induction by an external company. ISS Mediclean has provided enhanced cleaning throughout the COVID-19 Pandemic (cleaning three times a day instead of two) and extra cleaning due to other infections as requested by the IPCT.

Equipment Cleanliness Audits

A Head of Nursing and the ICN / IC Audit and Surveillance Nurse carry out equipment cleaning audits looking at ten key pieces of equipment in each area to generate a percentage score, which is colour coded. Results are demonstrated in Appendix 3. From April to June 2020 the audits were not completed due to the emergence of COVID-19. The monthly aim of completing the audits was not achieved throughout the rest of the year for the same reason however they were completed

five times in total for the year. The Infection Control Link Practitioners not auditing IV devices have also continued to carry out their own monthly equipment audits.

Environmental Audit

A number of peer reviews and ward checks were carried out in the following areas: ITU, Bronte ward, Blyth ward, Keats ward and Isabella ward during November and December 2020, with repeat audits to ensure compliance with actions required. Environmental audits were carried out in the following areas:

- Minor ops audit Colposcopy room NVH 07.08.20
- Minor ops audit endoscopy room NVH 06.08.20
- Minor ops audit room B5 MOPD 15.05.20
- Minor ops audit tool NVH treatment rooms 17.06.20

Other Audits

The IPCT contributed to the annual PEG tube insertion audit undertaken by the Gastro team.

14. Decontamination

One of the IP&C CNSs is the Trust Decontamination Lead (WTE 0.4). Key aspects of the role are to provide operational policies for decontamination of the environment, linen, equipment, and all medical devices and to ensure that reusable medical devices are effectively decontaminated:

- in accordance with published standards
- in fit-for-purpose premises
- by trained and competent staff
- in adherence to manufacturer's validated guidance, which is reflected in local procedures.

The Decontamination Group normally meets quarterly however, meetings scheduled for April and October 2020 were cancelled due to the COVID-19 pandemic.

The Decontamination Lead develops an annual plan each year, which is signed off by the Decontamination Group. In 2020-21 little progress was made with the annual plan due to the COVID-19 pandemic and most actions were rolled across into 2021-22. The following actions were completed:

- JAG IHEEM audit; the AE(D) recommended that the servicing and validation must be kept up to date, as there had been some slippage earlier in the year, and that COSHH Training should be provided, plus a spill exercise should be conducted.
- Completed audits in endoscopy decontamination and the endoscopy patient unit – both achieved high scores.
- Provided support on decontamination of new theatre tables and new WOWs.
- Provided advice to the gynae team on robust decontamination of TVUS and TRUS probes and the requirement for documentation thereof to support tracking and traceability.
- Supported the SSD move offsite (Steris).
- Rolled out the use of Cantel Trolleys for all scope transportation.
- An environmental audit was completed with the AE(D) in SSD in September 2020. The environment showed marked improvement since the last visit although there was evidence of flooring damage in the autoclave area, flaking paint on walls and ceiling in the IAP room and of a water leak at the rear of autoclaves, all of which were escalated to estates.
 - Track and trace was not in place – there was a blend of KHT records and Steris records.
 - Quarterly validations were not being reviewed by the AP(D) as the role was vacant. This responsibility was fulfilled by the AE(D) for the remainder of the year.
 - Steris implemented an SOP for reprocessing phaco handpieces to ensure vertical alignment during the process.
 - Quarterly testing failed on detergent use, which was attributed to the age of the equipment and was not a cause for concern.

15. The Built Environment

15.1 Projects

The IPCT provided input to the following building and refurbishment projects:

- Royal eye unit casualty extension
- Paediatric oncology
- Sunshine ward bathrooms and treatment room

The CNS IPCT flagged rooms that were not HTM compliant, and these were taken as derogations.

15.2 Ventilation

The number of air changes per hour (ac/hr) was found to be lower than recommended in HTM 03-01 in a few areas, as shown below. Incident reports were completed. These were not new findings and the Estates Team had been sighted on this since the reports were published. The appetite for mechanical ventilation and rapid turnaround of theatres and clinical rooms prompted a review of ventilation. The IPCT requested that a Trust Ventilation Group was established to monitor air quality in critical areas.

Main Theatre

The suboptimal air change rates were partly attributable to the age of the plant (theatre AHUs were designed to serve 20 ac/hr approx. 30 years ago). In addition, fire stopping works commenced in 2018 in Esher wing introduced fire/ smoke dampers that reduced the air flow rates. Estates commissioned improvements, which were expected to increase the number of ac/hr to 22-25 but were likely to lead to an increase in noise levels and could affect temperature control.

Main theatre	ac/hr Sep.2019	HTM 03-01 Recommendation
MT 1	14.5	25.0
MT 2	13.9	25.0
MT 3	14.9	25.0
MT 4	14.4	25.0
MT 5	18.7	25.0
MT 6	14.6	25.0
MT 7	21.5	25.0
MT 8	19.9	25.0

DSU

DSU	ac/hr Sept 2018	ac/hr Sept 2019	HTM 03-01 Recommendation
DSU 1	16.0	16.0	25.0
DSU 2	18.7	16.7	25.0
DSU 3	18.0	17.7	25.0
DSU 4	20.0	19.0	25.0

ITU

There is mechanical ventilation in only one of the five single rooms in ITU. None of the other single rooms have any form of mechanical ventilation and the same is true for the remainder of the unit. Estates are sighted on this. The IPCT have recommended that this is addressed as a matter of urgency.

Minor Ops room Main Outpatients

The number of ac/hr in the minor ops room in OPD was <15. Following improvements, the number of ac/hr was increased to 18.1.

Princess Alexandra Wing (PAW)

During the COVID-19 pandemic, suction and high-speed drilling in dentistry were identified as aerosol generating procedures. There was no mechanical ventilation in PAW. The consequent cleaning and downtime requirements had a major impact upon service provision. Estates,

Infection Control, and the Clinical Team worked together to seek a solution and air purifiers were installed to improve the number of air changes per hour and reduce the downtime after each patient.

ENT

Air change rates were all below 10 air changes per hour. There was no flow from the supply grilles in Roehampton Wing ENT Room 3 – 3.50. To improve air change rates, upgrade of AHU supply fan/ AHU extract fan volume will be required together with balance of air distribution. Vectair has serviced the equipment and improved flow & extract; additionally, six air purifier units have been installed in clinic rooms to achieve required air changes.

Canbury Ward Side Rooms

Air change rates were all below 10 air changes per hour. There was no flow from the supply grilles in Esher Wing Ward Rooms. To improve air change rates, upgrade of AHU supply fan/AHU extract fan volume will be required together with balance of air distribution. This requires further assessment.

The Trust AE(V) has a rolling contract for three years, which commenced in 2019.

15.3 Environmental assessments

- Room B5 in main OPD was assessed for its suitability for minor ops. There were a number of issues that made it unsuitable, including damage to paintwork and windows; the flooring did not have a coved return and there were exposed pipes in the ceiling.
- The New Victoria Hospital Colposcopy and Endoscopy rooms were unsuitable for minor operative procedures and minimal access interventions due to the presence of suspended ceilings.
- Rooms in Main outpatients, Kingston Private Health, DSU, Physiotherapy and DSU Endoscopy were assessed for their suitability to support relocation of services from Roehampton wing.
- The IPCT provided input to decisions on floor markings and placement and management of Perspex screens to support socially distant walkways and waiting areas during the COVID-19 pandemic.

16. Infection Control Staff Training

The IPCT provided face to face presentations for redeployment training in April 2020. Face to face training sessions were then put on hold due to the COVID-19 pandemic. Some training sessions were delivered via MS teams. The IP&C CNS recorded an infection control training session to be used on MS Teams for induction training.

17. Policy/ Guideline Review

There are around 60 Infection Control policies/ procedures/ guidelines available on the Trust intranet. All have been updated this year as required and ratified through the Infection Control Committee. Compliance is monitored against some via the DH Saving lives initiative and audit project work. The Infection Prevention and Control for Pandemic COVID-19 Guideline was continually updated as required following new directives from PHE and was on version 46 by the end of this financial year.

18. Further Infection Prevention & Control Initiatives

SWL IPC Forum

The Infection Control Lead Doctor, one of the CNS IP&C and the DIPC were attending the SWL IPC Forum weekly meeting (every Thursday afternoon) to discuss all emerging Covid-19 related IPC issues including implementation of National guidance, local protocols, regional and local data and incidents and nosocomial outbreaks. Aim of the SWL IPC group is a consistent IPC approach across SWL Acute Trusts and SWL community partners (HRCH, YourHealthcare, RHND, Mental Health Trust).

Link Practitioners

The Trust currently has Infection Control Link Practitioners in each clinical area. This person is allocated one day every two months specifically for infection control responsibilities including carrying out the Saving Lives audits and ensuring best practice regarding infection control in their own areas. The usual quarterly study days, in which the Link Practitioner business meeting is incorporated, have not taken place this year due to COVID-19. However, the IC Nurse and IC Audit and Surveillance Nurse continued to maintain links with individuals within the group.

19. Summary and Conclusion

Over the past year the IPCT has:

- Provided optimum guidance and support regarding the management of COVID-19 in the Trust, using continually updated information from PHE. Updated the Infection Control COVID-19 Guidance as soon as new advice has become available and supported departments with a number of new SOPs as the Trust has resumed services or required changes to facilitate further requirements.
- Reported new COVID-19 cases to the wards and clinical areas and flagged the patient CRS notes.
- Maintained the COVID-19 spread sheet and carried out surveillance on numbers, vaccination status, symptoms, acquisition of infection etc.
- Contact traced all COVID-19 positive cases and informed discharged cases.
- Carried out PIRs on patients that have a HOHA and HOPHA associated death.
- Managed outbreaks and incidents of infection, reporting to PHE.
- Supported the bed management team, including at weekends at the height of the second wave.
- Attended the weekly SWL Forum.
- Worked with the Kingston Local Contact Tracing Service (Kingston Public Health) on a brand new pilot scheme to help address the gap in contact tracing in the community when a person is in hospital.
- Completed and updated the Infection Control BAF.
- Taken part in the CQC interview which generated a positive report.
- Continued to report, flag, and provide advice on other infections.
- Carried out audits and spot checks where required, providing feedback and help where necessary to improve compliance.
- Facilitated mask fit testing on members of staff.
- Continued close monitoring of equipment cleaning to ensure improvements.
- Carried out SSIS and demonstrated low levels of infection.
- Supported building and refurbishment projects throughout the Trust and advised on the suitability of environments for clinical activity, in accordance with published guidance.
- Strengthened the Decontamination agenda and provided greater visibility and assurance on decontamination practices and problems across the Trust.

20. Recommendations / Key Priorities for 2021-22

- Continue to monitor for COVID-19 cases and provide the most up to date information on its prevention and control.
- Continue to ensure that mask fit testing is provided.
- Continually monitor and ensure best practice in infection control in order to have measures in place for the aim of meeting infection rate targets set by the DH.
- Observe and work towards MRSA / MSSA bacteraemia / new *C. difficile* targets as set by PHE, ensuring that PIR is carried out and monitored by the clinical / nursing teams through SLM and SIG, to ensure learning where applicable.

- Continue to manage infection outbreaks and incidents efficiently in order to keep our patients, staff, and visitors as safe as possible whilst maintaining hospital functioning. Liaise with PHE / CSU where required regarding outbreaks and incidents.
- Continue to flag patients on CRS with a new reported infection on a daily basis and advise staff regarding management of the infections.
- Ensure that patients with known infections are managed appropriately by checking all in-patient infection flags two to three times a week; advising staff of screening / treatment requirements in order to remove infection risk flags where possible and thereby facilitating release of side rooms. Continue to work towards optimal screening of patients for MRSA, CPE, VRE etc. and prompt stool sampling in accordance with DH requirements.
- Complete on-going work to ensure the best care of intravenous devices in order to prevent infections, ensuring conclusion of the IV audit action plan and further monitoring.
- Monitor hand hygiene / bare below the elbow audits and facilitate improvements where required.
- Successfully implement the Trust FFP3 resilience plan.
- Monitor the environment in clinical areas in terms of infection control by carrying out monthly equipment audits; and environmental spot checks on a rolling programme.
- Survey surgical site infection as part of the Surgical Site Infection Surveillance Service, carrying out six months of orthopaedic surveillance as a minimum.
- Aim to ensure that staff are adequately protected against certain respiratory infections by improving the numbers of staff passing the mask fit test.
- Provide infection control training to new and existing members of staff where required.
- Provide support to the Matrons in the Trust working collaboratively with other areas in the Catheter Care of Practice project.
- Work in tandem with Estates, Maintenance and Capital Projects to ensure that the fixtures, fittings and finishes of new builds and refurbishments are reflective of the relevant Health Technical Memoranda and Health Building Notes, to provide the optimum environment in which to deliver care ensuring that the risk of infection to patients during works projects is minimised throughout.
- Secure Executive sign off for derogations on building projects where HTM standards are not met.
- Work towards inspiring a group of effective Infection Control Link Practitioners, who are responsible for day-to-day infection control matters in their own areas of work.
- Continue to attend and support meetings and groups as required (Matrons ACE, PLACE, Medical Devices Group, Water Safety Group, Ventilation Group, SIG, Nursing and Midwifery Board, etc.).
- Further progress the Decontamination agenda:
 - Aim to reduce the number of supplementary instruments reprocessed and instead incorporate items into sets to affect a cost reduction.
 - Aim to reduce the number of instrument sets that are fast tracked to affect a cost reduction.
 - Aim to review all Trust instrumentation to remove and replace items that are in poor condition.
 - Aim to bring the Trust into line with other Trusts regarding standardisation of wrapping of surgical instrument sets/ trays.

21. References, sources, and further reading

Department of Health (2009) *Clostridium difficile* infection: How to deal with the problem. Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/340851/Clostridium_difficile_infection_how_to_deal_with_the_problem.pdf

(Accessed 09 September 2021).

Department of Health (2015) *The Health and Social Care Act 2008 Code of Practice on the prevention and control of infections and related guidance*. London. Department of Health.

Department of Health (2015) *Saving Lives: reducing infection, delivering clean and safe care*. London. Department of Health.

NHS Improvement (2017) *Preventing healthcare associated Gram-negative bloodstream infections: an improvement resource*. Available at: <https://www.england.nhs.uk/patient-safety/preventing-gram-negative-bloodstream-infections/> (Accessed 09 September 2021).

NHS Improvement (2019) *Clostridium difficile* infection objectives for NHS organisations in 2019/20 and guidance on the intention to review financial sanctions and sampling rates from 2020/21. London. NHS Improvement.

Public Health England (2021) *Coronavirus (COVID-19): guidance*. Available at: <https://www.gov.uk/government/collections/coronavirus-covid-19-list-of-guidance> (Accessed 09 September 2021).

Appendix 1
Hand Hygiene 2020 – 2021 per Month by Clinical Area

Ward / Area	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
A&E	89.6%	96.7%	96.7%	90.8%	92.0%	96.0%		96.0%	93.0%	95.0%	98.0%	
A&E - Paediatric	100.0%	100.0%	100.0%			100.0%	99.0%	87.2%	100.0%			100.0%
AAU		95.0%	95.0%	97.0%	99.0%	97.0%	95.0%	96.0%	97.0%	99.0%	97.0%	100.0%
AEC											100.0%	
Alex	100.0%			100.0%	100.0%	98.7%	99.0%	99.0%				
Astor	100.0%	99.0%	100.0%	100.0%	95.8%	100.0%	99.0%	96.0%	89.0%			88.8%
Audiology					98.5%	98.4%	98.9%	98.6%	99.0%			98.3%
Blyth	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	97.9%	99.0%	99.0%
Bronte	92.1%	98.0%	100.0%	99.0%	100.0%	98.0%	97.0%	94.0%	94.0%	98.0%	98.0%	98.0%
Cambridge	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	98.9%	100.0%	100.0%	100.0%	96.0%	100.0%
Derwent	99.0%	99.0%	99.0%	99.0%		98.0%	99.0%	99.0%	99.0%	99.0%		98.0%
DSU				100.0%		100.0%						100.0%
Endoscopy				90.0%		95.0%	97.0%	98.0%	95.9%	95.8%		
ENT					100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%
Haematology Day Unit	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Hamble	94.9%	99.0%	93.0%	95.0%	98.0%	99.0%	98.0%	93.6%	97.0%	99.0%	97.0%	97.0%
Hardy			96.9%	96.8%	93.8%	93.0%	99.0%		96.8%	96.9%	96.7%	95.8%
Isabella	96.0%	98.0%	100.0%	98.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
ITU			97.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			100.0%
Keats	95.0%	81.6%	99.0%	94.0%	98.8%	99.0%	97.7%		99.0%	95.3%	96.5%	96.4%
Kennet	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Kingston Private	100.0%		100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Main Theatres		95.5%	100.0%	100.0%	97.6%	97.7%	100.0%	97.7%				
Maternity - Delivery Suite		96.0%	96.9%	94.0%	98.0%		98.0%	89.5%	94.0%	97.9%	100.0%	100.0%
Maternity - Birth Centre	100.0%	100.0%	100.0%	100.0%	100.0%	99.0%	99.0%	100.0%	100.0%	100.0%	100.0%	
Maternity - Thameside Antenatal	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	98.6%	98.2%
Maternity - Thameside Postnatal	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Maternity - Transitional Care	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Maternity - Worcester	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
NNU	97.1%	100.0%	95.8%	95.8%	100.0%	100.0%	97.8%	97.9%	97.9%	97.9%	100.0%	100.0%
Ophthalmology - REU	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
PAW	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Radiology	100.0%	100.0%	97.4%	97.4%	100.0%	100.0%	100.0%	100.0%	97.4%	100.0%	100.0%	100.0%
Sunshine	100.0%	100.0%	95.9%	97.7%	100.0%		100.0%	100.0%		100.0%	100.0%	100.0%

Appendix 2 Monthly IV Documentation Audits 2020 - 2021

Ward / Area	Insertion / Care	April	May	Jun	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
ED	Insertion												
Alex	Insertion				N/A		100%	100%					
	Care				100%		100%	90%					
Astor	Insertion	80%	40%			100%			50%	N/A			N/A
	Care	100%	90%			100%			100%	20%			66%
Blyth	Insertion	67%	63%	100%	100%				70%		78%	83%	
	Care	87%	100%	100%	100%				90%		100%	88%	
Kennet	Insertion		45%			80%	55%	65%	65%	75%		75%	
	Care		100%			90%	100%	95%	100%	100%		85%	
Bronte	Insertion				100%		100%	100%	100%	60%	75%	85%	85%
	Care				70%		95%	80%	85%	35%	75%	85%	85%
Derwent	Insertion											50%	
	Care											100%	
Hardy	Insertion			50%	50%	60%	87%	80%		85%	88%	100%	100%
	Care			100%	100%	100%	100%	100%		100%	100%	100%	100%
Hamble	Insertion	33%	90%		90%	80%	100%	95%	90%	100%	100%	100%	100%
	Care	75%	90%		100%	100%	100%	90%	100%	80%	80%	100%	100%
Keats	Insertion		78%	100%	100%	90%		65%			75%	90%	65%
	Care		89%	83%	100%	100%		100%			85%	85%	100%
AAU	Insertion		100%	100%	100%	100%		100%	100%	100%			NA
	Care		100%	100%	100%	100%		90%	100%	100%			100%
Cambridge	Insertion			100%	90%	70%	72%	100%	85%		85%		85%
	Care			100%	100%	100%	100%	100%	100%		100%		100%
Isabella	Insertion	100%			50%	100%	100%						100%
	Care	100%			100%	100%	100%						100%
Paediatrics	Insertion		83%		71%			83%	71%		100%	100%	80%
	Care		100%		86%			100%	100%		100%	100%	100%
ITU	Insertion						65%	67%	100%				75%
	Care						100%	100%	100%				100%
KPU	Insertion			100%			100%	100%	100%	100%	78%	72%	90%
	Care			100%			50%	100%	100%	50%	80%	50%	50%

Appendix 3 Equipment Cleaning Monthly Audits

Ward / Area	April 2020	May 2020	June 2020	July 2020	Aug 2020	Sept 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021	Mar 2021
RED Majors				10%		40%	90%		30%			70%
ED Majors				80%		20%	70%		90%			70%
Red Resus							70%		90%			60%
Resus				70%		70%	60%		90%			60%
CDU				20%		70%	80%		90%			90%
Red CDU							60%		90%			
SDEC				N/A		50%	100%		100%			80%
UTC						90%			100%			100%
RAP/Red CDU				Close								90%
ED (Paeds)				70%		50%	100%		100%			90%
Alex				90%		90%	100%		Move			70%
Astor				80%		100%	80%		100%			100%
Blyth				90%		90%	100%		90%			20%
Kennet				90%		100%	100%		90%			100%
Bronte				70%		80%	90%		70%			90%
Derwent				90%		80%	100%		90%			90%
Hardy				100%		100%	100%		100%			90%
Hamble				80%		70%	90%		100%			70%
Keats				70%		100%	100%		90%			100%
AAU				80%		75%	90%		65%			85%
Cambridge				90%		70%	90%		100%			90%
Canbury												30%
Isabella				40%		90%	100%		100%			80%
OPD L4				70%								
OPD ENT				90%		100%						
SWRU				100%								
Phlebotomy				100%								
Gynae OPD				90%			70%		60%			
Dental				100%		40%	90%		80%			
Sunshine				100%		100%	100%		100%			100%
Dolphin				100%		70%	100%		100%			100%
Maternity TC				80%					90%			40%
TSPN				100%					70%			40%
TSAN				90%					50%			80%
Malden				90%					90%			90%
Delivery				90%					100%			80%
Worcester				20%					100%			70%
NNU				100%					100%			100%
REU				80%		90%	80%		100%			
ITU				100%		80%	80%					60%
Pre-assess				100%			80%		100%			60%
Radiology				80%		100%	80%		90%			
ACU				90%			100%		100%			
Haem Day				100%			80%		100%			100%
MDU				50%		90%	80%		100%			60%
DSU				100%		100%	100%		100%			100%
Endoscopy				80%			80%		100%			50%
AEC				70%								
KPH				100%		80%	100%		80%			100%

Appendix 4 Glossary of terms

Asepsis - the prevention of microbial contamination of living tissue/fluid or sterile materials by excluding, removing, or killing micro-organisms.

Bacteraemia – the presence of micro-organisms in the bloodstream.

Biopatch – a small disc applied to the intravenous insertion site containing Chlorhexidine Gluconate to reduce the risk of infection while the absorbent foam draws discharge away from the catheter site.

Blood cultures - a laboratory test to check for bacteria or other microorganisms in a blood sample.

Blood stream infection - the presence of microbes in the blood with significant clinical consequences (e.g., fever, chills, and hypotension)

Carbapenemase-producing Enterobacteriaceae - Enterobacteriaceae are a large family of bacteria that live harmlessly in the gut of all humans and animals however, they can cause opportunistic infections. Carbapenem antibiotics are a powerful group of antibiotics. Rapid spread of carbapenem-resistant bacteria has the potential to pose an increasing threat to public health.

Clostridium difficile - is an organism that lives in the gut that sometimes produces a toxin which causes colitis.

CRS - the NHS Care Records Service is a service provided by NHS Connecting for Health for the National Health Service in England which provides mobile patient records and documentation.

Decolonisation protocol – topical treatments given to patients with MRSA skin carriage, consisting of cream in the nose and a skin wash.

E. coli – (*Escherichia coli*) bacteria that are normal flora of the intestine with some strains having the ability to cause infection in other areas of the body (i.e., blood, urine). *E. coli* are also becoming an important reservoir of extended-spectrum beta-lactamases (ESBLs) which are multiple antibiotic resistant.

Gram negative blood stream infection - an infection in the blood stream caused by Gram-negative bacteria such as *Escherichia coli*, *Klebsiella* and *Pseudomonas aeruginosa*.

Group A Streptococcus - (GAS) is a bacterium which can colonise the throat, skin and anogenital tract. It can cause a diverse range of skin, soft tissue, and respiratory tract infections. GAS can occasionally cause infections that are extremely severe, such as necrotising fasciitis. Invasive GAS (iGAS) is when the bacteria are found in the blood stream i.e. by taking blood cultures.

Healthcare associated infection (HCAI) - any infection that develops as a result of receiving healthcare treatment.

Hepatitis A – an acute viral illness.

Influenza- a respiratory illness associated with infection by influenza virus. Symptoms frequently include headache, fever, cough, sore throat, aching muscles and joints.

Intravenous device - a device inserted into the vein for giving medications or fluids (including cannula and central line).

Klebsiella – bacteria that are normal flora of the intestine but can cause opportunistic infections elsewhere in the body (i.e., blood, urine)

'Lapse in Care' – a term used with regards to *Clostridium difficile* toxin positive patients when there has been an aspect of care or treatment outlined in hospital policy (or guidelines) that has not been adhered to.

Measles – a common and highly infectious childhood illness that may affect any age group. Early symptoms include the onset of fever, malaise (aches and pains), coryza (head cold), conjunctivitis (red eyes) and cough. It is vaccine preventable.

Meticillin sensitive *Staphylococcus aureus* (MSSA) - *Staphylococcus aureus* is a bacterium that commonly colonises human skin and mucosa e.g., inside the nose, without causing any problems. However, the bacterium is capable of causing infections, i.e., in a wound or the blood stream.

Meticillin resistant *Staphylococcus aureus* (MRSA) - strains of *Staphylococcus aureus* that are resistant to many of the antibiotics commonly used to treat infections. Some strains are more likely to cause an infection than others i.e., they are more virulent.

Norovirus - the most common cause of infectious gastroenteritis (diarrhoea and vomiting) in England and Wales. The illness is generally mild, and people usually recover fully within 2-3 days.

Outbreak - two or more epidemiologically linked cases of infection caused by the same micro-organism in place and / or time.

Panton-Valentine Leukocidin (PVL) MRSA / *Staphylococcus aureus* (SA) - Some strains of MRSA or SA (see above) are more likely to cause infections than others i.e., they are more virulent. Strains that produce a toxin called Panton-Valentine Leukocidin (PVL) are more likely to cause infections, particularly of the skin.

Patient 'Flag' – a system of alerting staff to important information regarding a patient in their CRS records.

PEG tube - a percutaneous endoscopic gastrostomy tube is an endoscopic tube that is passed into a patient's stomach through the abdominal wall, most commonly to provide a means of feeding when oral intake is not adequate.

Pertussis – whooping cough, a respiratory infection.

Pseudomonas – gram negative bacteria that are common in the environment, but which can cause clinical infection particularly in people with diabetes or those who are immunocompromised.
Pseudomonas aeruginosa

Scabies - is an intensely itchy and contagious skin infestation which can be passed from one person to another by touching.

Surveillance – the systematic observation of the occurrence of disease in a population with analysis and dissemination of the results.

Vancomycin resistant enterococci (VRE) Enterococci are Gram-positive bacteria that are naturally present in the intestinal tract of all people. Vancomycin is an antibiotic to which some strains of enterococci have become resistant. The resistant strains are referred to as VRE.

Visual Infusion Phlebitis score - a standardised approach to monitoring intravenous device sites. Phlebitis is inflammation of the wall of a vein which can be caused by a number of things, including intravenous devices.