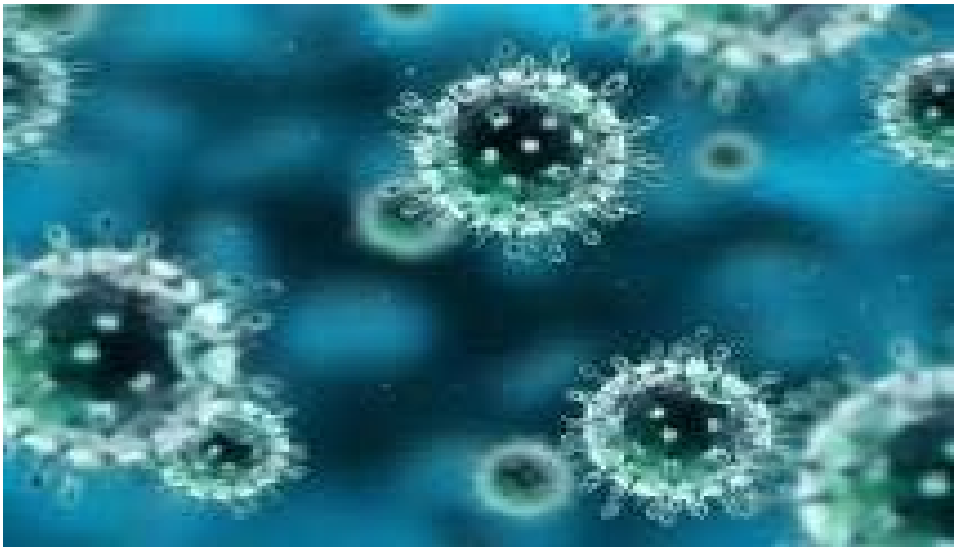
2019/20

Infection Prevention & Control Annual Report



Report compiled by: The Infection Prevention & Control Team
Shrewsbury & Telford Hospital NHS Trust
May 2020

Foreword by Director of Infection Prevention and Control (DIPC)

Infection Prevention and Control Annual Report 2019-20

This Annual report covers the period 1st April 2019 to 31st March 2020 and has been written in line with the ten criteria as outlined in the Health and Social Care Act 2008 Code of Practice in the Prevention and Control of Infection (updated 2015). The ten criteria outlined in the code are used by the Care Quality Commission to judge a registered provider on how it complies with Cleanliness and Infection Prevention & Control requirements detailed in the legislation. It looks at all aspects of IPC, including monitoring and surveillance, environment, cleaning, staff, policies and laboratory provision.

However the biggest challenge for Infection Prevention and Control this year is one that we will continue to face for the next few months at least, the COVID 19 pandemic.

SECTION 1: KEY ACHIEVEMENTS OF 2019-20

- Our Flu vaccine coverage for staff increased from 75% in 2018/19 to 83% for winter 2020/21, exceeding the 80% target. A total of 3875 influenza vaccines were given to our staff. . This great achievement was due to the hard work of our Infection Control Team, Occupational Health Provider; Team Prevent and other nurse vaccinators employed by the trust.

  Our MRSA bacteraemia target is zero. In 2018/2019 the Trust had one MRSA bacteraemia which was a reduction from the 5 cases reported in the previous year.

- A new Ultra Violet based cleaning system has been introduced to assist in the reduction of nosocomial infections

- Point of Care Flu testing on admission was introduced to facilitate rapid isolation of flu cases thus reducing spread to other patients

- The Trust was assessed by NHSE/I in June 2019 and then again in October 2019 at which time the RAG rating was improved from Red to Green

- The arrival of the COVID 19 pandemic at the beginning of 2020 introduced a new and very significant challenge to all acute services both in the UK and internationally. The IPC team was actively involved in planning for patients with COVID 19 and helping staff with their management. This involved continuous updating and training of staff as new guidance was released as knowledge about the virus increased. At the end of March 2020 we introduced in-house testing for COVID-19. Managing the pandemic and recovery from it will be an ongoing workload for the team in 2020/21

- Staff Training

    - One of our clinical scientists in microbiology attended the residential course on Engineering Aspects of Infection Control at Eastwood Park Training Centre. This covers very technical aspects of infection control such as ventilation, decontamination and water supplies

    - Further enhanced the knowledge and skills of our Infection Prevention and Control Nursing Team; One of our Band 7 nursing staff has completed the Infection Prevention and Control degree at Birmingham City University

SECTION 2: Abbreviations

AMR	Anti-Microbial Resistance
ASG	Antimicrobial Stewardship Group
CCG	Clinical commissioning groups
C *difficile*	Clostridium *difficile*
CCG	Clinical Commissioning Group
CDI	Clostridium *difficile* infection
CQC	Care Quality Commission
CQUIN	Commissioning for Quality and Innovation Payment Framework
DH	Department of Health
DIPC	Director of Infection Prevention & Control
DON	Director of Nursing
E coli	Escherichia coli
ESBL	Extended Spectrum Beta Lactamase
GDH Ag	Glutamate dehydrogenase antigen of *C. difficile*
GRE	Glycopeptide Resistant Enterococcus
GP	General Practitioner
HCAI	Health Care Associated Infection
IM&T	Information & Technology
IPC	Infection Prevention & Control
IPCC	Infection Prevention & Control Committee
IPCN	Infection Prevention & Control Nurse
IPCT	Infection Prevention & Control Team
MGNB	Multi resistant gram negative bacilli
MHRA	Medicines and Healthcare Products Regulatory Agency
MRSA	Meticillin Resistant *staphylococcus aureus*
MSSA	Meticillin Susceptible *staphylococcus aureus*
PCR	Polymerase Chain Reaction
PFI	Private Fund Initiative
PHE	Public Health England
PLACE	Patient-led assessments of the Care environment
PPE	Personal Protective Equipment
RAG	Red, amber, green
RCA	Root Cause Analysis
SaTH	Shrewsbury & Telford Hospitals
SSI	Surgical Site Infection
TWCCG	Telford & Wrekin Clinical Commissioning Group
VNTR	Variable number tandem repeat (a form of DNA typing)

SECTION 3: INTRODUCTION

The Trust recognises that the effective prevention and control of healthcare associated infections (HCAI) is essential to ensure that patients using our services receive safe and effective care. Effective prevention and control must be an integral part of everyday practice and applied consistently to ensure the safety of our patients. In addition, good management and organisational processes are crucial to ensure high standards of infection prevention and control measures are maintained.

This report demonstrates how the Trust has systems in place for compliance with the Health and Social Care Act 2008: Code of Practice for the NHS on the prevention and control of healthcare associated infections and related guidance.

The Trust set out to continue the commitment to improve performance in infection prevention practice. As outlined in the Health and Social Care Act 2008, at the heart of this there are two principles:

- to deliver continuous improvements of care
- it meets the need of the patient

Compliance with the Health Act is judged against 10 criteria which we will look at in detail in the next section.

Criterion	Detail
Criterion 1	There are systems to monitor the prevention and control of infection
Criterion 2	Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infection
Criterion 3	Ensure appropriate antimicrobial use to optimise patient outcomes and reduce the risk of adverse events and antimicrobial resistance
Criterion 4	Provide suitable accurate information on infectious to service users, their visitors and any person concerned with providing further support or nursing/medical care
Criterion 5	Ensure prompt identification of people who have or are at risk of developing an infection so that they receive timely and appropriate treatment to reduce the risk of transmitting infection to other people
Criterion 6	Ensure that all staff and those employed to provide care in all settings are fully involved 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

SECTION 4: COMPLIANCE

Criterion 1:

Systems to manage and monitor the prevention and control of infection. These systems use risk assessments and consider how susceptible service users are and any risks that their environment and other users may pose to them.

Infection Prevention Team

The Infection Prevention and Control Team (IPC) provided IPC advice and support to wards and departments. The team continued to support frontline staff and prioritise urgent IPC issues during winter pressures. The Trust IPC Team experienced a number of changes in personnel over the last year. This resulted in periods of low staffing levels due to the recruitment period.

At the Shrewsbury and Telford Hospital NHS Trust (SaTH) the Director of Infection Prevention and Control (IPC) has overall responsibility for the IPC Team; however the team is managed by Janette Pritchard (Lead Nurse Infection Prevention and Control). The structure for Infection Prevention and Control in the Trust is shown in Appendix 1.

Dr Patricia O'Neill as Infection Prevention and Control Doctor (IPCD) works for IPC part-time and is a Consultant Microbiologist. In addition another three consultant microbiologists continue to provide support to the IPC Team. Barbara Beal, Interim Director of Nursing & Quality, took over as Director of Infection Prevention and Control in June 2019.

The Trust was visited by NHSI on two occasions during 2019/20 to review IPC practices. Visits took place in May 2019 and then again in October 2019 when the assessment improved from RED to GREEN on the NHSE/I internal escalation matrix.

NHSE/I said the visit demonstrated a continued focus and energy on Infection Prevention. This was identified both during the meetings and the clinical visits to the six clinical areas across the two sites.

NHSE/I were also impressed with the following:

- A Trust Board IPC development session is being planned
- There is improved engagement with staff across the organisation
- Confirm and challenge meetings have been set up and have proven beneficial
- IPC nurses have now been allocated specific wards- this has improved ward relationships and engagement for which the Heads of Nursing were grateful for
- A formal IPC review of the Neonatal Unit (NNU) had been undertaken and actions completed
- Previous visit findings had been actioned.
- Cleaning checklists had been developed
- Post outbreak cleaning documentation and sign off has been devised.
- Cleaning hours: The Trust has reviewed its cleaning provision and cleaning is now being undertaken in ED until 10pm
- New UV cleaning system purchased.
- Cleaning technicians in place.
- Raised awareness of staff roles and responsibilities: the IPC team are undertaking Matrons masterclasses.
- Estates: there is a significant backlog which is being reviewed. The estates team provides regular updates on outstanding risks. Identified stronger relationship with IPC team.

- Microbiology support: at present there is a WTE vacancy which is proving difficult to recruit to (this is not a local issue but one which several trusts are identifying). This was due to the retirement of two of the consultant microbiologists. Patricia O'Neill has returned post retirement 2/7 week to continue the ICD role. We have appointed a Consultant Clinical Scientist in Microbiology but still have a WTE vacancy.

An action plan was developed to address the concerns with a cross reference to the Health Act as per NHSE/I recommendations. Additionally an improvement plan was developed to address issues flagged in the Emergency department; both were then monitored via the Infection Prevention Control Committee.

The Trust Infection Control Committee is held monthly and is chaired by the Director of Nursing, Midwifery & Quality or Deputy. Each Care Group is required monthly to report on IPC performance and key actions.

Infection Prevention & Control issues are raised at the monthly meetings of the Quality and Safety Committee, which reports directly to Trust Board and is attended by the Director of Nursing & Quality.

The IPC service is provided through a structured annual programme of work which includes expert advice, audit, teaching, education, surveillance, policy development and review as well as advice and support to staff, patients and visitors. The main objective of the annual programme is to maintain the high standard already achieved and enhance or improve on other key areas. The programme addresses national and local priorities and encompasses all aspects of healthcare provided across the Trust. The annual programme is agreed at the IPC committee and then reported to the Trust Board.

Whilst writing this report at the end of the financial year the Trust started seeing inpatient cases of COVID 19. The National COVID 19 pandemic has caused significant pressures to the IPC Team & a business case is currently being written to increase the size of the team and to enable the provision of a 7 day service. Significant work has taking place regarding the correct placement of patients during their stay in SaTH. The Pandemic has also highlighted that the Trust has a significant issue with lack of side rooms.

During the Covid pandemic the IPC Team has been supported by staff that previously had IPC experience being redeployed to the team.

Committee Structures and Assurance Processes

The committee structure in relation to Infection Prevention and Control reporting are shown in Appendix 2.

Trust Board

The Code of Practice requires that the Trust Board has a collective agreement recognising its responsibilities for Infection Prevention and Control. The Chief Executive has overall responsibility for the control of infection at SaTH. The Trust designated Director of Infection Prevention and Control. The DIPC attends Trust Board meetings with detailed updates on infection prevention and control matters. The DIPC also meets regularly with the Chief Executive.

Quality & Safety Committee

The Quality & Safety Committee is a sub-committee of the Trust Board and is the committee with overarching responsibility for managing organisational risks. The committee reviews high level performance data in relation to infection prevention and control, monitors compliance with statutory obligations and oversees management of the risks associated with infection prevention and control.

Quality and Safety (Q&S) is responsible for ensuring that there are processes for ensuring patient safety; and continuous monitoring and improvement in relation to infection prevention. The Q&S forum receives assurance from IPCC that adequate and effective policies and systems are in place. This assurance is provided through a regular process of reporting. The IPT provide a monthly report on surveillance and outbreaks.

Antimicrobial Management Group

The Antimicrobial Stewardship Group (AMG) is a multidisciplinary group responsible for the monitoring and review of good antimicrobial stewardship within the Trust. The AMG reports directly to the Trust board through the Drug and Therapeutics committee and meets on a bi-monthly basis. The group drives forward local activities to support the implementation of international and national initiatives on antimicrobial stewardship including Start Smart then Focus and the European Antibiotic Awareness Campaign. The AMG produces and updates local antimicrobial guidelines which take into account local antibiotic resistance patterns; regular auditing of the guidelines; antimicrobial stewardship practice and quality assurance measures; and identifying actions to address poor compliance with guidelines.

Antimicrobial audit results related to compliance with the local antimicrobial guidelines are produced monthly. These are reported to the Clinical Governance leads that are tasked with onward dissemination. There is an escalation process for clinical areas that do not follow clinical guidelines and there is active engagement at Executive level with Senior Clinicians in Specialities with repeated non-compliance.

On average the Trust's prescribers choose antibiotics in accordance with the antimicrobial guidelines in approaching 90% of cases, which is a slight improvement over the last 12 months. Antibiotic course durations comply with the guideline in 75% of cases. This has remained the same over the last 12 months. Improving effective antibiotic prescription review is an on-going priority at the trust with the hope that this figure will improve over time.

The Antibiotic Pharmacists and Pharmacy Team are working hard to help the Trust meet the national requirements for reduction in antibiotic usage and take an active part in auditing and submitting information for CQUINs. Our well recognised narrow spectrum antibiotic policy has been instrumental in achieving 65% WHO access antibiotic usage against a target of 55%.

There is a separate **Local Health Economy Infection Prevention & Control and Antimicrobial Group** which is chaired by the Lead Shropshire CCG Nurse. The group meets quarterly, and has representation from all key stakeholders, including microbiologists. A regular report is submitted to IPCC.

Decontamination Meetings

The Trust Decontamination Lead is the Chief Executive. The management of Decontamination and compliance falls into three distinct areas: Estates, IPT and the Equipment User, details are outlined later in the report.

Water Safety Group

The Water Safety group is a sub group of IPCC and meets quarterly. It is chaired by the DIPC / Deputy DIPC with multi-disciplinary representation.

Reports/Papers Received by IPCC

Monthly	Bimonthly
Scheduled Care Group Report	Occupational Health Report
Unscheduled Care Group Report	MRSA Bacteraemia Action Plan
Women and Children's Care Group Report	**Quarterly**
Support Services Care Group Report	Antimicrobial Stewardship Report
IPC Team Report	IPC Annual Programme Update
Cleanliness Monitoring Report	Water Safety Group Minutes
HCAI Update Report	Health and Safety Update (FFP3 / Sharps)
PHE Update	Decontamination Group Minutes
IPC Policies for approval	HCAI Self-Assessment Update
Annually	
IPC Annual Report for approval	
IPC Annual Programme for approval	

Groups/Meetings Infection Prevention Team Attend

Monthly	Quarterly
Infection Prevention and Control Committee	IPC Link Nurse Meetings
Policy Approval Group	BSI Reduction Group
Devices, Products and Gases Committee	Decontamination Group
Nursing, Midwifery and Allied Health Professionals Forum	Water Safety Group
Matrons Meetings	LHE IPCN Forum
Operational Risk Group	LHE IPC and Antimicrobial Prescribing Group
Housekeepers Meetings	Trust Antimicrobial Management Meeting
Ad-hoc	
C difficile RCA Multidisciplinary Reviews	
Post Infection Review Meetings	
Outbreak/Period of Increased Incidence Meetings	
Estates Refurbishment / Planning Meetings	
Site Safety Meetings	

Infection Surveillance (including external targets)

All organisms of IPC significance are monitored by the IPC team. Currently this is a very manual and time consuming process, involving daily lists generated by the Microbiology Department and emailed to the IPC secretaries. This is not a robust process and has proved particularly cumbersome during the COVID 19 pandemic. We hope to get an automated surveillance system in 2020/21 which is much more efficient in tracking patients and infections and should release time for IPC nurses, secretarial staff and consultant microbiologist staff.

Clostridium difficile

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

Infection is nearly always preceded by antibiotic treatment but antibiotics may have been stopped up to 6 weeks before the patient presents with symptoms. Although most antibiotics have been implicated, broad-spectrum agents such as cephalosporins, quinolones and carbapenems (e.g. Meropenem) are most likely to cause it as they wipe out the “normal flora” of the gut which usually holds C difficile in check.

The Trust reports all cases of C difficile diagnosed in the hospital laboratory to Public Health England. Prior to April 2019, only cases where the sample was taken later than the third day after admission were considered attributable to the trust. But this definition has now changed as of April 2019. Our target for C difficile in 2019/20 was no more than 43 trust apportioned cases in patients over the age of 2 years.

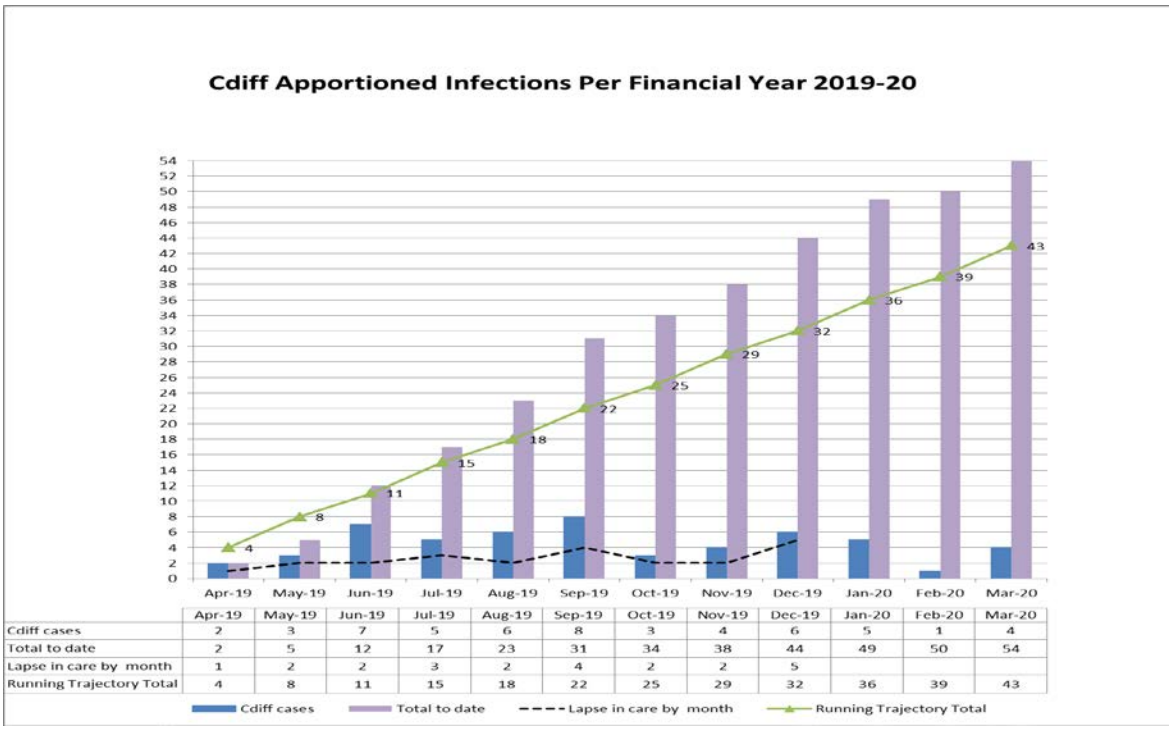
At end of the 2019/2020 year there were 54 trust apportioned cases so we have exceeded our limit of 43 trust apportioned cases. Of these, 26 cases were Hospital Onset Healthcare Associated ie sample taken in hospital more than 2 days after admission; and 28 cases were Community Onset Healthcare Associated i.e. patients were positive in the community but had been in hospital within the preceding 28 days. It is difficult to compare these figures with last year as the definitions have changed. Last year 2018/2019 we had 18 cases but this only counted cases diagnosed in hospital more than 3 days after admission.

The Trust continues to review all cases to assess whether there was a “lapse in care”. Through Root cause analysis (RCA) cases where the trust does not feel there was a lapse in care are sent for appeal to be reviewed by an external panel comprising members of the Clinical Commissioning Groups for Shropshire and Telford and Wrekin, Public Health England, and NHSE/I

Shropshire and Telford and Wrekin CDI Appeals Panel have reviewed 40 of the 54 CDI cases attributed to SaTH in 2019/20. In 20 cases the panel upheld the Trust’s decision that there were no lapses in care which directly or indirectly contributed to the patients acquiring CDI; however the panel believed that lapses in care had most likely occurred in the other 20 cases which directly or indirectly contributed to the patients acquiring CDI. Of the remaining 14 cases, 5 cases were not submitted to the panel as the Trust determined that lapses in care which directly or indirectly contributed to the patients acquiring CDI had most likely occurred. The nine cases reported in Quarter 4 have not yet been reviewed by the Panel as this was stepped down due the change in focus in response to the Covid-19 pandemic.

The commonest cause of C diff was antibiotic prescribing, but this was mostly within prescribing guidelines. Preventable causes included:

- In two cases issues with cleanliness noted so cross infection could not be ruled out
- prescribing antibiotics outside of guidelines
- Lack of samples before antibiotics so unable to change to a narrow spectrum agent.
- delay in isolation before a positive result



	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20
Cdiff cases	2	3	7	5	6	8	3	4	6	5	1	4
Total to date	2	5	12	17	23	31	34	38	44	49	50	54
Lapse in care by month	1	2	2	3	2	4	2	2	5			
Running Trajectory Total	4	8	11	15	18	22	25	29	32	36	39	43

Clostridium difficile Action Plan

Work continues to reduce the cases of C difficile. This relies upon appropriate antibiotic prescribing and advice, the earliest detection of possible C.difficile case and prompt isolation of patients with diarrhoea. All positive C. difficile stool samples are telephoned to the ward as soon as they are available with advice on the most appropriate antibiotic based on the clinical scenario. These measures taken into account with environmental cleaning, and good hand hygiene technique and practice will help in reduce cases overall and cross infection. Introduction of Hydrogen Peroxide Vapour and Ultra violet light deep cleaning will also reduce cases.

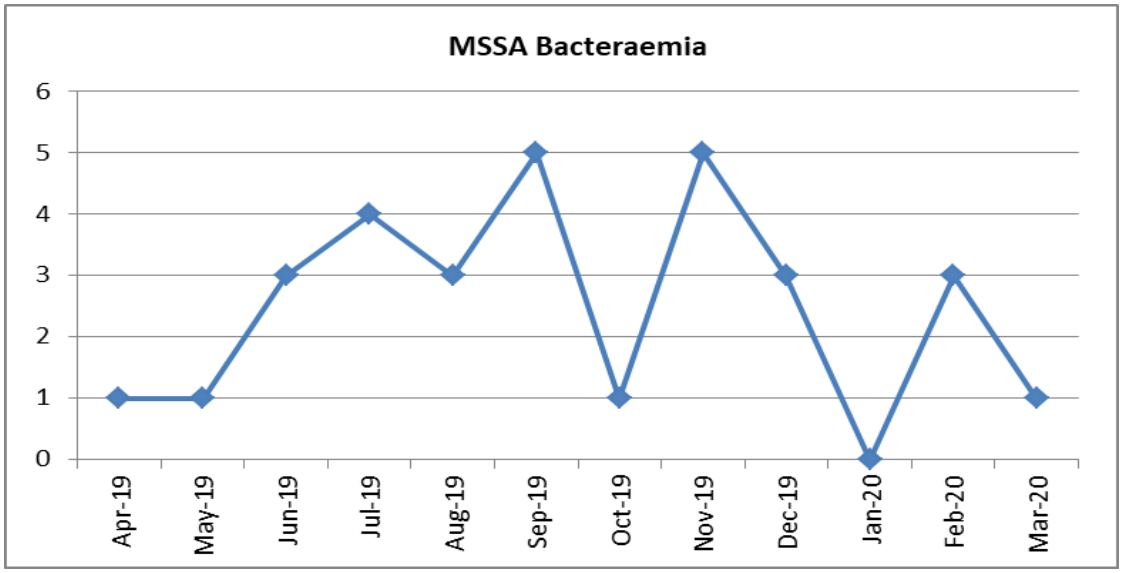
As from April 2020/21 financial sanctions have been removed from the NHS contract. Thereby, the CDI Panel will not be reviewing 2020/21 cases. The Trust however, is still expected to undertake a review of each case to identify whether there is any learning to be shared.

MRSA Bacteraemia

In 2019/20 there was one trust apportioned MRSA bacteraemia case (this is against a target of zero). The source was identified as arising from skin/soft tissue infection. Two further cases of MRSA bacteraemia were identified and apportioned to the community. Last year we had five cases of which four were contaminants. The trust has a MRSA recovery action plan in place which focuses on ensuring staff are competent in taking blood cultures. This is monitored monthly at the IPCC meeting.

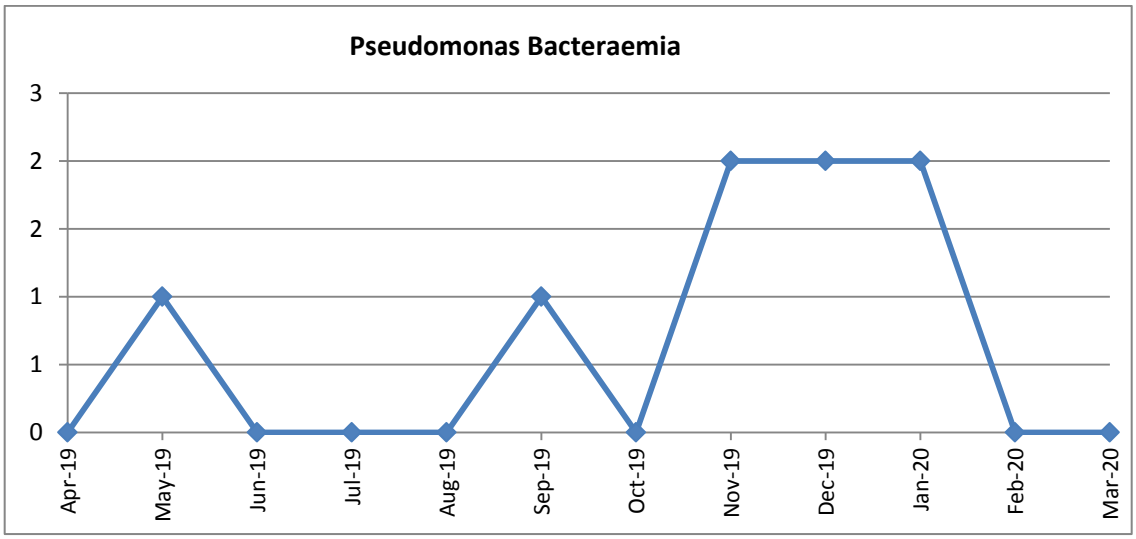
MSSA Bacteraemia

Thirty MSSA bacteraemia cases were apportioned to the trust for the period 2019/2020. Last year 2018/2019 there were 23 trust apportioned cases of MSSA. This is an increase of seven. We do not have a formal target for reduction of MSSA bacteraemia cases. The cases of bacteraemia were associated with the following sources of infection. Infected peripheral lines, infected pacemakers, skin and soft tissue infections and septic arthritis.



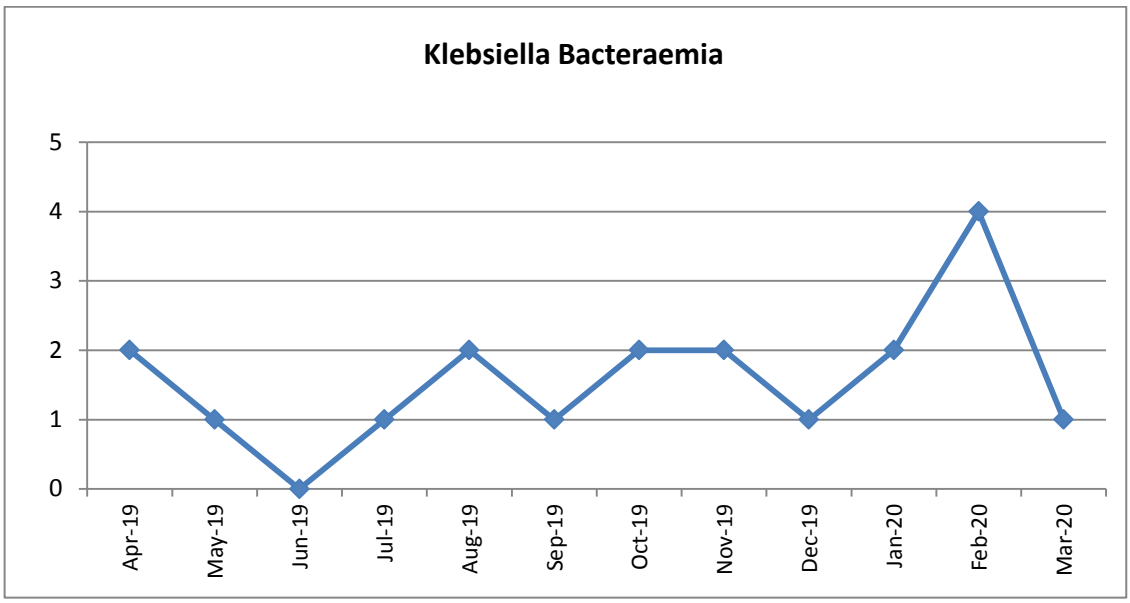
Gram Negative Blood Stream Infections

In 2019/20 the Trust had 8 trust apportioned pseudomonas cases, compared to 4 cases in 2018/19. The bacteraemia cases were associated with the following sources; 1) Pneumonia 2) lower respiratory tract infection 3) Upper UTI- urine catheter associated. 4) Acute lymphoblastic leukaemia 5). There were 2 cases were the source of infection could not be established.

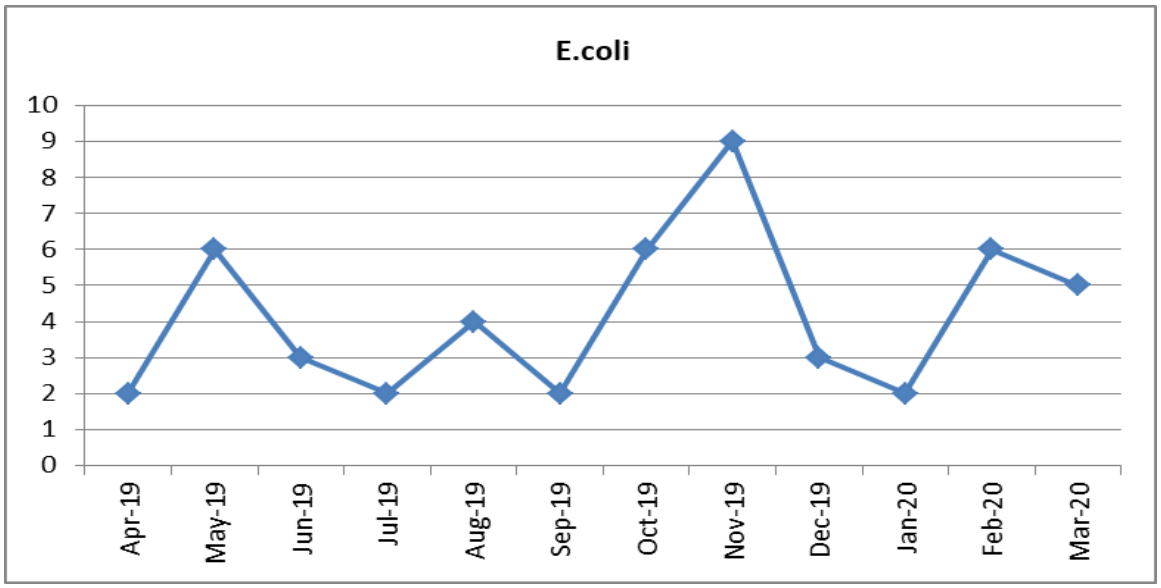


In 2019/20 we had 19 trust apportioned Klebsiella bacteraemia cases, compared to 14 cases in 2018/19. The cases were associated with the following sources of infection; 1) Urinary tract

infections 2) Catheter associated urinary infection 3) Skin and soft tissue infection 4) Line infection 5) Post ERCP.



In 2019/20 we had 50 trust apportioned Escherichia coli bacteraemia cases, compared to 52 in 2018/19. This is a reduction of 2 cases on last year.



Since 2018/19 there has been a continued focus on using the Health Economy approach to reduce *Escherichia coli* bloodstream infections as they represented 55% of all Gram-negative bloodstream infections nationally.

The Secretary of State for Health launched an important ambition to reduce healthcare associated Gram-negative bloodstream infections by 50% by 2021 and reduce inappropriate antimicrobial prescribing by 50% by 2021. Gram-negative bloodstream infections are believed to have contributed to approximately 5,500 NHS patient deaths in 2015. We know GNBSI cases can occur in hospitals however, half of all community onset cases have had some healthcare interventions either from Acute, Primary or Community Care. Therefore, a Health economy approach is required to achieve the reductions

Research evidence has established that the most important risk factors for healthcare associated Gram Negative infections are:

- Indwelling vascular access devices (insertion, in situ, or removal)
- Urinary catheterisation (insertion, in situ with or without manipulation, or removal)
- Other devices (insertion, in situ with or without manipulation, or removal)
- Invasive procedures (e.g. endoscopic retrograde cholangio-pancreatography, prostate biopsy, surgery including, but not restricted to, gastrointestinal tract surgery)
- Neutropenia (low white cell count – usually from chemotherapy)
- Antimicrobial therapy within the previous 28 days
- Hospital admission within the previous 28 days.

The local Health Economy group of which SaTH is a member, met quarterly throughout this period to further expand the work and raise awareness required to prevent Gram negative infections. Most of the work has been to reduce urinary catheter related infection in the hospital and the community by the introduction of the Catheter Card, carried by the patient. The card is given to every patient who is catheterised as a way of communication to all healthcare providers of the reason for catheterisation and when to change or remove it. This card has been well received and discussed regionally.

An awareness initiative to promote the Antimicrobial Resistance and Lower Urinary Tract Infections in older people was undertaken by developing a poster and discussing it with medical and nursing staff in clinical areas. This was to highlight the NICE guidance about diagnosis, treatment and antibiotic management of UTI in older patients. The poster featured the "Dip-No dip" campaign slogan to remind staff not to use a dipstick to diagnose UTIs in the older person.

IPC staff designed posters called "WEE NEED YOU" which were given to the wards alongside background education regarding the timely review and documentation that is required in monitoring use of urinary catheters. This was shared in the trust media page "Chatterbox" and was approved by the IPC NHSEI Lead during their visit. The urology specialist nurse is now using these items for teaching clinical staff.

Within the group there is also a focus on Antimicrobial Stewardship and the effective systems and processes for monitoring compliance with antimicrobials. This is reported through pharmacy and through IPCC.

National Hydration Week was celebrated within the trust focusing on areas such as dementia care and Speech/Language therapy where patients' ability to undertake hydration is of a paramount importance. We also highlighted hydrating fruit options and physical aids that can be used to help dementia patients.

Carbapenemase–Producing Enterobacteriaceae cases (CPE)

CPE are gram negative bacteria which are so resistant to antibiotics that even our last line of defence – carbapenem antibiotics – are ineffective. So it is extremely important to detect patients with these bacteria and prevent spread through isolation and cleaning. Public Health England published a toolkit for the early detection, management and control of CPE in December 2013. The toolkit provides expert advice on the management of CPE to prevent or reduce the spread of these bacteria into (and within) health care settings, and between health and residential care settings. The Trust has a CPE policy in place. This reflects screening guidance recommended by Public Health England.

2018-19 the trust had nine Cases of CPE. Five of those cases were attributed to the Trust. During the period 2019/20 the trust had six Cases of CPE attributed to the trust.

Audit Programme to Ensure Key Policies are Implemented

SaTH have a programme of audits in place, undertaken by both clinical areas and the IPT, to ensure that areas are consistently complying with evidence based practice and policies. Action plans which were devised by clinical areas where issues are highlighted were fed back to the IPCC via the Matron/ Head of nursing for the area.

Audit title	Completed	Key Findings
Commode Audit	Sept 2019	74% commodes were noted as clean and stored correctly- IPC to audit regularly on quality ward walks 23% of areas used green decontamination bands on commodes and bed pans- standard decontamination label to be rolled out by procurement team
Isolation/side room availability and utilisation audit, including placement and management of diarrhoea patients (twice yearly July and Nov)	Aug 2019	The average availability of single rooms with en-suite in UK was 20.7%, in SaTH is 7.5%. Inadequate side rooms to isolate all patients with a history of a significant organism according to national guidelines Inadequate side rooms to isolate all patients with diarrhoea (T5-7) There is a trend of non-compliance with isolation etiquette trust wide, side room doors left open without documented evidence of risk assessment Action IPC Roadshow, focus on isolation, regular audit on isolation etiquette as part of quality ward walk
Sluice Audit	Sept 2019	246 estate issues identified across both sites, some of which were still outstanding from 2017's audit. This is a 9% improvement from 2017. Action-Estates and cleanliness team to update IPCC on progress
Audit of IPC Care Plan 'H' and documentation	Sept 2019	All patients that required isolation were isolated. All patients with a current infection risk had an infection status sheet, however in all cases these had been put in place by the IPC nurses not the ward nurses. If side room doors were unable to be kept closed, a reason was not always documented in the notes. Whilst MRSA screening was always documented on the front of the nursing admission document, the CPE risk assessment was not done at all. Action- Infection status sheet discontinued, new IPC care plan in place to be ordered and completed by the ward. Launched at IPC roadshow Nov 2019. Nursing documentation being reviewed by the trust as a whole.
Use of PPE (Gloves and Aprons) Link Nurses	Feb 2020	Postponed due to COVID. Completed in May 2020 through clinical audit, awaiting results.
Segregation of Linen (review audit first & invite facilities to complete)	Dec 2019	Linen was found to be clean at the point of delivery to the ward. Linen was not always found to be disposed of at the bedside. Linen rooms were found to house inappropriate items Action- linen segregation posters available in all sluices, Ward managers aware that linen should be kept in a designated area to reduce risk of cross contamination.

Infection Prevention and Control Quality Ward Walks

As of April 2019, the Quality Ward Walk process changed to assess an area of IPC each month rather than all aspects each quarter, this has increased our visibility on the ward and has been well received by department managers. Remedial actions are being put into place in a timelier manner. The following 3 categories are assessed monthly

- Environment and Equipment
- Isolation/Management of Infective Patients
- Invasive devices

The IPCT also record any other observations of IPC concern. These will be marked as a percentage and if the ward/department falls under the 80% pass rate the IPCT will then add that particular category into the following month and complete it again. Any areas that fail a consecutive assessment will be required to provide a robust action plan that gives assurances on the areas that require improvement.

Reoccurring non-compliance noted during the QWW was utilised during the IPC roadshow, such as “It’s in your hands” provided focused themes around hand hygiene and glove awareness, this also provided educational opportunities to reinforce good practice and to discuss key points.

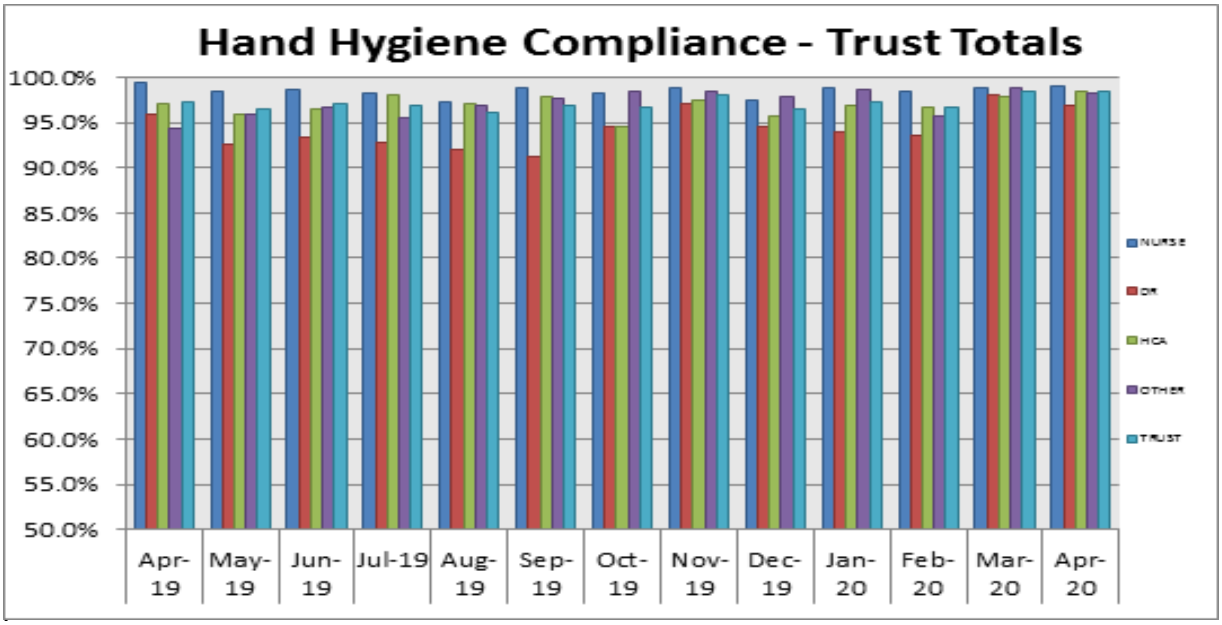
During the year, IPC worked closely with the cleanliness team to review and produce new robust cleaning checklists. Ongoing monitoring in ED has meant the introduction of extended evening cleaning is now implemented. The trust has also implemented evening cleaning hours for every ward across both sites.

The IPC Team work closely with the Estates Department. Monitoring, reviewing and reporting any outstanding work to be completed. A prioritised list of work was produced and reviewed monthly at IPCC.

The IPC team have been supporting and monitoring both Emergency departments over the past 12 months. Both areas have received daily visits and weekly Quality ward walks, concentrating on PPE, Hand hygiene and the department environment. Any issues are immediately escalated to the department manager, Matron and Head of nursing. The IPC team and Estates department have collaboratively reviewed the area; this has resulted in increased hand washing facilities in the department & improved decoration. Throughout the Covid 19 pandemic the IPC team have supported both sites with advice for clinical placement of patients and staff training with enhanced PPE.

Audits of Hand Hygiene Practice

All wards audit their compliance with hand hygiene at least monthly. Results are shown in the table below. Overall compliance remains over 95%. However, whilst the overall average for nurse and HCA compliance was consistently over 95%, the doctors’ overall hand hygiene compliance fell below 95% on nine occasions throughout the year.

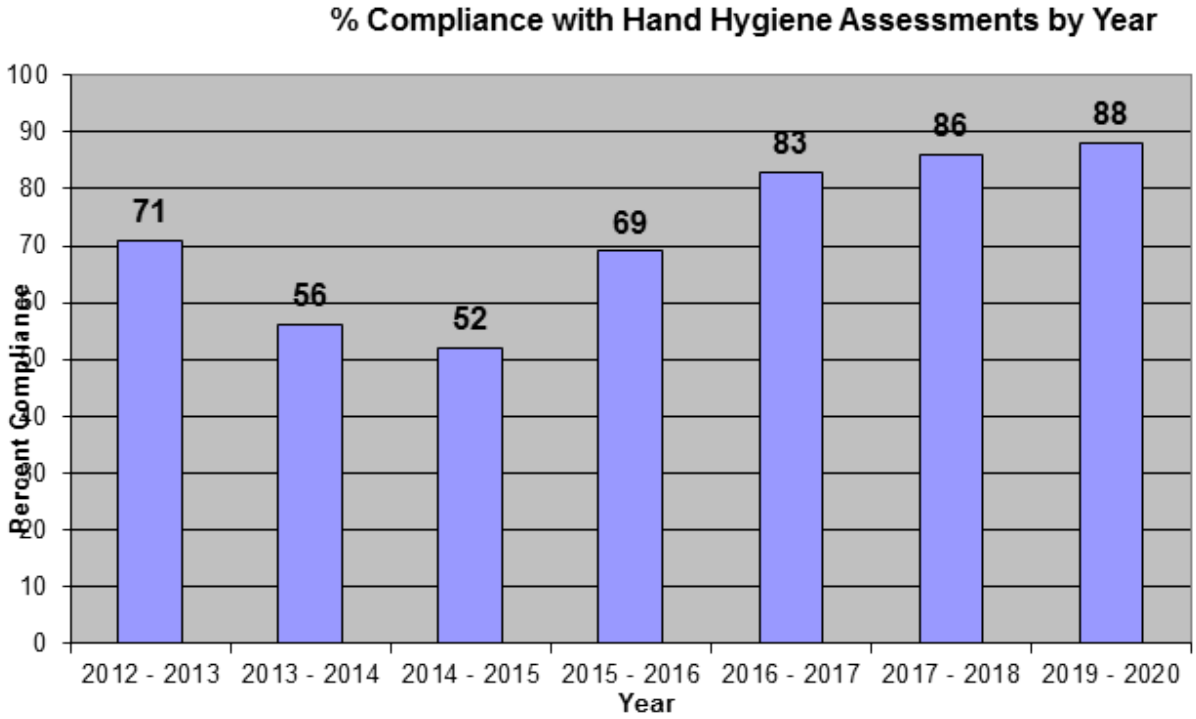


Hand hygiene technique assessments

The Trust Hand Hygiene Policy stipulated that staff have their hand hygiene technique assessed within one month of starting their employment and reviewed 3 yearly It is the responsibility of the Ward Manager and the IPC link nurse to ensure these assessments are carried out.

The overall compliance rate for 2019/20 was 88%. This is a marginal improvement on last year's 86%. It should be noted that these figures do not take into account medical staffing as listed below. From April 2020 this review will be required every year.

Historically not all doctors were included in the assessment of hand hygiene technique. Now all junior doctors are assessed when they start in August and senior doctors are required to have a 3 yearly hand hygiene assessment. This will be changed to yearly from April 2020. For 2019/21 compliance for doctors was 77%. This is an improvement of 7% when compared to last year's results.



Criterion 2:

Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections

Cleanliness Team

The cleaning provided at SaTH for all clinical and non-clinical areas is completed by the in-house Cleanliness Team. Cleanliness Technicians are responsible for ensuring that cleaning methodologies are rigorously applied and the frequencies are maintained. All cleaning staff play an essential role in ensuring that the Trust reduces hospital acquired infections which helps to promote confidence in patients and visitors.

Monitoring Processes for In-house Cleaning

The Cleanliness Team are committed to ensuring high standards of cleanliness and that these standards are maintained by promptly addressing any shortfalls. The Team work to national targets and local standards which are reflected in the Environmental Audit scores and our Patient-Led assessments of the care environment (PLACE) results. The Trust monitoring team use a the MiC4C (credits for cleaning) software which is widely used across the NHS, visible checks of all elements are carried out, the system then generates a report and percentage score, the reports are sent to the Cleanliness Management team, Estates Team, Ward Managers and Matrons for action.

The Senior Cleanliness Manager or Site Cleanliness Managers also participate in any outbreak or periods of increased incidents (PII) meetings, when issues are identified on site.

Scheduled and ad hoc meetings with Infection Prevention, Matrons and clinical colleagues to regularly monitor, review progress and address/resolve any issues are held to ensure that standards and performance target and compliance is met, whilst empowering Nurse Managers to be involved in the monitoring of cleanliness standards.

PLACE Inspection

SaTH PLACE assessment took place during September 2019. The annual assessments involve local people (known as patient assessors) going into hospitals as part of teams to assess how the environment supports the provision of clinical care, assessing such things as privacy and dignity, food, cleanliness and general building maintenance and, more recently, the extent to which the environment is able to support the care of those with dementia and disability.

Audit Cleanliness scores at SaTH for PLACE 2019 are as follows,

RSH 99.57%, PRH 100%, Overall Score 99.60% against the National Average of 98.60%.

Terminal Cleans

All terminal cleans at SaTH are requested via the internal bleep system during Cleanliness Working hours. Any terminal cleans outside of these times are requested via switchboard to an external company. Hydrogen Peroxide decontamination of infected side rooms is requested as per the Cleanliness Team RAG poster

Radiator Cleaning

SaTH has a planned annual programme of radiator cover removal to allow for cleaning.

Criterion 3:

Ensure appropriate antibiotic 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) includes representatives from pharmacy, microbiology, nursing and medical staff. This group manages policy with regard to antimicrobial stewardship, formulates policy with regard to antimicrobial stewardship and responds to concerns in this area. The group feeds back actions and concerns to the executive board via the drug and therapeutic committee and reports in to the Infection Prevention and Control Committee.

The action of AMG continues to be hampered by the lack of attendance of the medical and nursing representatives. This means that the group meetings are often non-quorate. Actions by the group can therefore be difficult to implement.

The group undertakes the following actions

- Production of the antibiotic guidelines publishing them both on the trust intranet and the micro guide app
- Yearly update of the antibiotic guidelines
- A regular update of the Trust Antimicrobial Stewardship Policy.
- A rolling Antimicrobial Audit Programme in line with Start Smart then Focus has been in place across the Trust for a number of years.
- The Trust's Antimicrobial Guidelines were reviewed and temporary alternative guidance issued when certain key antibiotics were unavailable due to global and national shortages.
- The Antimicrobial Guideline App (Microguide) for mobile devices continues to be popular with prescribers, facilitating easy access of antimicrobial guidelines at the point of prescribing. The web-based app allows more efficient updating of guidelines following review by AMG members. A paediatric version of the guideline was introduced for the first time this year.

Undertaking of audits has been difficult to achieve without the facility of electronic prescribing and the loss of one Antimicrobial Pharmacist has meant that feedback to clinical governance leads has not been possible. However there continues to be regular monitoring of prescribing at ward level and pharmacist antibiotic related interventions are reviewed each month.

The antibiotic pharmacist continues to undertake FY1 teaching in August/September for the new intake and attends medical and surgical clinical governance meetings to communicate information where necessary.

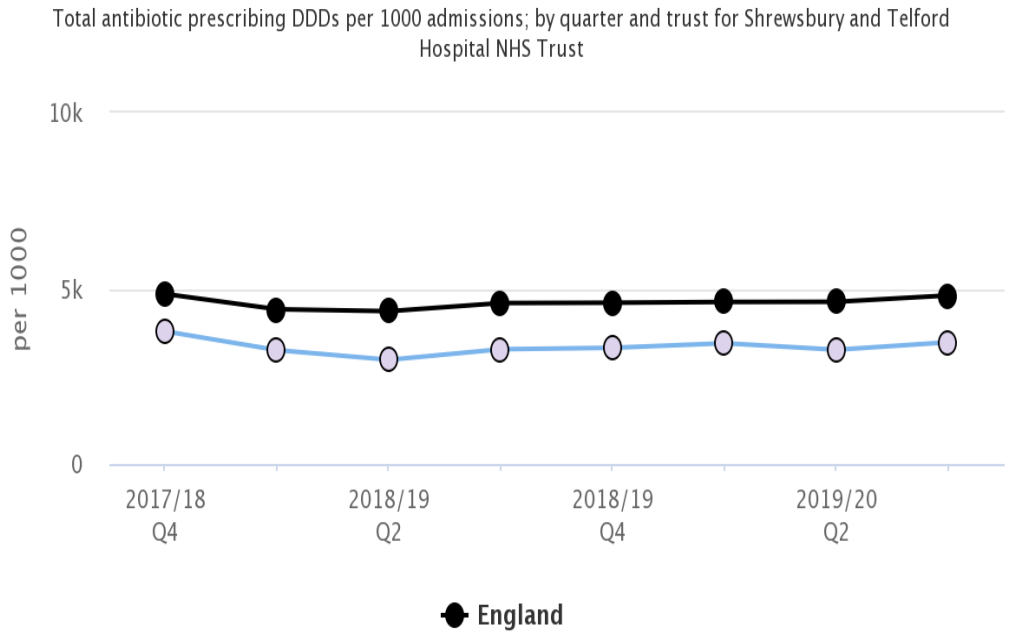
The appointment of a sepsis nurse has led to positive work surrounding sepsis and areas now have sepsis boxes and drawers or a sepsis trolley to assist in the prompt treatment of those patients suspected of having sepsis.

In common with other Trusts in the UK, SaTH faced challenges as a result of ongoing shortages of a number of key antimicrobials due to manufacturer's supply problems. Aztreonam injection continues to be intermittently available; there have also been issues with piperacillin/tazobactam and benzylpenicillin. This is expected to worsen with the situation surrounding COVID-19. The AMG, Microbiology and Pharmacy Departments worked collectively to ensure that alternative agents were available for patients in a timely manner.

- Antimicrobial guidelines were reviewed and alternative agents chosen taking into account antimicrobial stewardship and local resistance patterns, benefits and risks of proposed substitute agents, including cost pressure to the Trust as a result of using more expensive alternatives.
- Alternative medicines were sourced, purchased and made available in key areas via review of stock lists.
- Information on dosing, administration and side effects of the new alternative was communicated to prescribers, nursing staff and pharmacists.
- Antibiotics that are in short supply are restricted to those conditions considered highest priority or were an appropriate alternative is not available.

CQUIN Summary 2019-20

- Total consumption of antibiotics has been moved from a CQUIN target to national contracting, there is a requirement to reduce this by 1% each year.
- SaTH continues to be a lower than average user of antibiotics.
- There were two antimicrobial resistance CQUINs this year; lower urinary tract infections in older people and antibiotic prophylaxis in colorectal surgery.
- CQUIN completion has been challenging due to situation relating to COVID-19 therefore it was agreed nationally that results would be based on quarters 1-3 only.
- The lower urinary tract infections CQUIN has not been achieved and requires considerable input from both medical and clinical colleagues for next year in which it has been expanded.
- The colorectal surgery CQUIN is in the range of achievement and there has been engagement with clinicians to maintain and improve results.



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.

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.

The IPC and Communications Teams work together to:

- Promote IPC events.
- Communicate campaign to inform GPs and the public around management of Influenza and Norovirus, through the Trust's GP Liaison.
- Update the Trust website and intranet.
- Issue media statements during outbreaks.
- Support the annual flu vaccination campaign

Trust Website and Information Leaflets

The Trust website promotes infection prevention issues and guides people to performance information on MRSA, Clostridium *difficile* and other organisms.
The IPT have produced a range of information leaflets on various organisms.
The Trust has a policy on the transfer of patients between wards and departments.
A large number of documents relating to COVID 19 were added in February and March 2020, including information for patients, visitors and staff. This included topics such as volunteering, symptoms of COVID 19, how to keep healthy and avoid infection, how to get tested and visiting. This continues to be updated by the Communications Team with advice from IPC as new information becomes available.

Criterion 5:

Ensure prompt identification of people who have or are at risk of developing an infection so that they receive timely and appropriate treatment to reduce the risk of transmitting infection to other people.

Infection Prevention Nurses are alerted of daily laboratory alert organisms.

The Trust has a policy for screening both elective and emergency patients for MRSA and a system is in place for monitoring compliance.

Clinical Portal System / SEMA

The microbiologists work with IPC Team regarding patient alerts. The SEMA system includes alerts for patients with a history or current MRSA, CDI, PVL-toxin producing *S. aureus*, ESBL, VRE or Carbapenemase producing multi-resistant Gram Negative Bacilli, Flu, blood borne viruses and COVID-19 was added at the start of the pandemic in 2020. These alerts enable staff on wards and departments to promptly identify patients who have recently had an alert organism identified, allowing wards/departments to isolate in a timely manner, follow-up patients appropriately and to prescribe appropriate empiric antibiotics if antibiotic treatment is indicated. Alerts are automatically added to clinical portal from SEMA to ensure the information is available on all systems used.

Surgical Site Infection Surveillance (SSISS)

SaTH continues to participate in the Public Health England (PHE) National Surveillance Programme. It is a mandatory requirement for acute trusts to participate in the collection of surgical site infections for a minimum of one orthopaedic category over one surveillance period each financial year. SaTH also collects data on other categories of surgery. Following submission to PHE for analysis & reporting the data is used as a benchmark allowing individual trusts to compare their infection rates with other participating hospitals.

The aim of SSIS is to enhance the quality of patient care by encouraging hospitals to use data obtained from surveillance to compare their rates of surgical site infections over time and against a national benchmark rate, this information is used to review and guide clinical practice.

A rolling programme of surgical site surveillance was developed to cover as many surgical procedures as possible. This can be adapted if there are any concerns in a particular area. SaTH carries out continuous surveillance in total hip replacement and total knee replacement the Gynaecology ward staff collects continuous surveillance in abdominal hysterectomy including post discharge.

The team collect local evidence of surgical site wound infections, which develop whilst the patient is in hospital and once discharged home. This continues for 30 days postoperatively (if an implant is present this can continue up to one year) and is followed up with a Patient self-reported feedback questionnaire, although this is helpful it can be seen as less reliable. Cases of identified surgical site infections are reviewed through a Root Cause Analysis (RCA), the definitions for a deep, superficial and organ space infection are described in the SSISS guidelines via PHE. An RCA ensures that a robust process is in place for the identification of any surgical site infection and identifies where improvements can be made in clinical practice. This aids effective and thorough reporting to PHE as often just one infection can take us above the National Benchmark due to low numbers of surgeries per category.

Surveillance carried out at SaTH 2019-2020

Type of Surgery	Qtr	No. of Cases	No. Inpatient Readmission Infections (%)	National infection Rate	No. Eligible for post discharge	Return rate %	Post Discharge infections
Neck of Femur RSH	1	94	0 (0%)	1%	86	64%	0
Neck of Femur PRH	1	71	1 (1.4%)	1%	57	42.1%	0
Vascular RSH	1	65	1 (1.5%)	2.5%	39	64.1%	2
Total Hip Replacement PRH	1	54	1 (1.9%)	0.4%	49	77.6%	2
Total Knee Replacement PRH	1	38	0 (0%)	0.3%	37	86.5%	0
Neck of Femur RSH	2	84	2 (2.4%)	1%	74	74.3%	0
Neck of Femur PRH	2	61	0 (0%)	1%	55	65.5%	0
Total Hip Replacement PRH	2	78	2 (2.6%)	0.4%	75	78.7%	3
Total Knee replacement PRH	2	62	0 (0%)	0.3%	62	87.1%	2
Abdominal Hysterectomy	2	17	0 (0%)	1.2%	16	18.8%	0
Total Hip Replacement PRH	3	60	0 (0%)	0.4%	60	85%	1
Total Knee Replacement PRH	3	48	0 (0%)	0.3%	48	85.4%	0
Vascular RSH	3	64	0 (0%)	2.6%	60	71.1%	0
Abdominal Hysterectomy	3	54	0 (0%)	1.2%	54	9 PD 45 reviewed	0
Neck of Femur RSH	4	89	0 (0%)	0.9%	82	29 PD 53 reviewed	1
Neck of Femur PRH	4	62	0 (0%)	0.9%	55	17 PD 38 reviewed	0
Total Hip Replacement PRH	4	34	0 (0%)	0.4%	34	34 reviewed	0
Total Knee Replacement PRH	4	33	0 (0%)	0.3%	33	33 reviewed	0
Reduction of long Bone PRH	4	52	0 (0%)	0.9%	51	51 reviewed	0
Reduction of long Bone RSH	4	65	1(1.5%)	0.9%	65	15 PD 50 reviewed	1
Abdominal Hysterectomy	4	34	0 (0%)	1.2%	34	20/PD 14 reviewed	2

Quarter 1 April-June
Quarter 2 July-September
Quarter 3 October-December
Quarter 4 January-March

During January-March (quarter 4) limited post discharge was carried out, all patients during this quarter were reviewed using positive microbiology swab results, patient's readmissions due to wound healing problems and the review of hospital follow up appointments.
During this quarter we had 1 infection in 65 operations in reduction of long bone at RSH, due to small numbers we look at the last 4 quarters in which we participated and we have had 1 infection in 160 operations which gives us an infection rate of 0.6% which is below the national infection rate for this category of surgery.

Over the year we received two high outlier letters from PHE, one for Repair of neck of femur (RSH) 2 infections in 84 operations (2.4%) and the other for Total Hip Replacement (THR), 2 infections in 78 operations (2.6%) both occurring during July-September quarter.

Relatively low numbers of operations are performed per quarter and 2 infections will take SaTH over the national infection rate, therefore the last 4 periods are considered. Repair of neck of femur (0.6%) with the national being 1% and THR (1.6%) which is higher than the national rate of 0.4%.

A root cause analysis was carried out on the four infections; the consultants were involved in this process. On analysis of the RCAs, the two neck of femur infections were readmission infections, both requiring theatre intervention for debridement and washout, both of these patients were considered high risk with several co-morbidities. An ASA recorded score of 3 and 4 with onset of symptoms occurring at days 16 and 32. There was documentation to suggest that both of these patients had been removing their dressing post-operatively. The previous quarter we received a low outlier letter in this category of surgery.

The THR infections occurred 15 and 27 days postoperatively, both were readmission, deep infections requiring further surgical intervention, both had high BMI's of over 37.
Similarities between the four cases have found temperature documentation intra operatively and type of dressing used are not consistent. All patients received appropriate antibiotic prophylaxis and skin preparation prior to incision, microbiology specimens taken from each patient grew different organisms. Pico dressings are now the dressings recommended for all orthopaedic joint replacements across SaTH.

Infection prevention and control quality ward walks have been carried out on the elective orthopaedic ward and trauma wards, both areas have maintained above the acceptable standard. The matron's for these areas are involved in improving compliance in hand hygiene audit scores and have been 100%.

Responses to these high outlier letters have been sent to PHE by the infection prevention and control team in conjunction with the Lead Consultant Microbiologist.

Managing Outbreaks of Infection - Responses to Incidents and Outbreaks

The IPC Team are involved in the management of outbreaks, periods of increased incidence and incidents.

The IPC team monitors all alert organisms to identify trends and potential links between cases based on their location. If links are identified, a Period of Increased Incidence (PII) investigation is commenced and a meeting to discuss potential cases is held within 3 working days wherever possible.

In 2019/20 8 PIIs were declared as outbreaks out of a total 26 clusters investigated.

All outbreaks are discussed for the purpose of shared learning and service development through care group governance meetings. Recurring themes from investigations are disseminated through the IPC committee.

Action plans that are put in place by the ward manager and/or matron are monitored by the IPC team for compliance, once compliance has been demonstrated the action plans are signed off by the lead nurse for Infection Prevention and Control and the Matron or Head of Nursing for the area.

If further PIIs are linked to the same area, previous action plans are revisited.

Month	Ward	Organism	No. of cases	Typing results
June 19	26	Gent R ESBL Klebsiella	6	5 of 6 same type
August 19	16	Gent R ESBL E.coli	2	2 of 2 Same
Sept 19	22RE	VRE	2	2 of 2 Same
Sept 19	17	Gent R ESBL E.coli	3	3 of 3 Same
Oct 19	26	MRSA	3	3 of 3 Same
Dec 19	22TO	MRSA	2	2 of 2 same
Dec 19	32SS	C.diff	3	2 different to each other, unable to type third
Jan 19	26	Gent R ESBL Klebsiella	3	2 of 3 same
Feb 19	22TO	Norovirus	12 patients and 3 staff	N/A

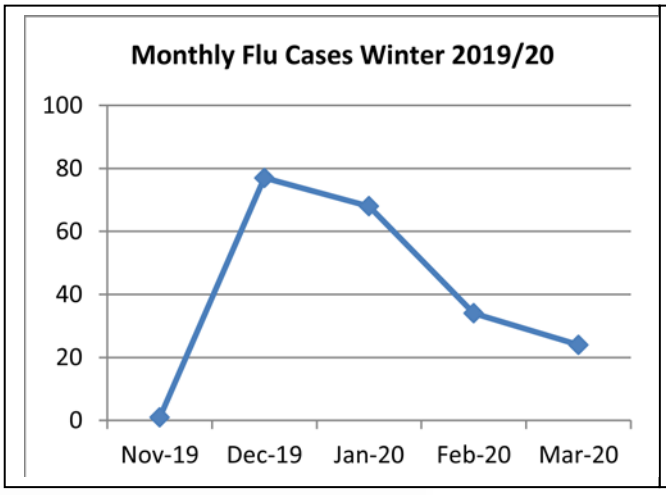
Seasonal Influenza

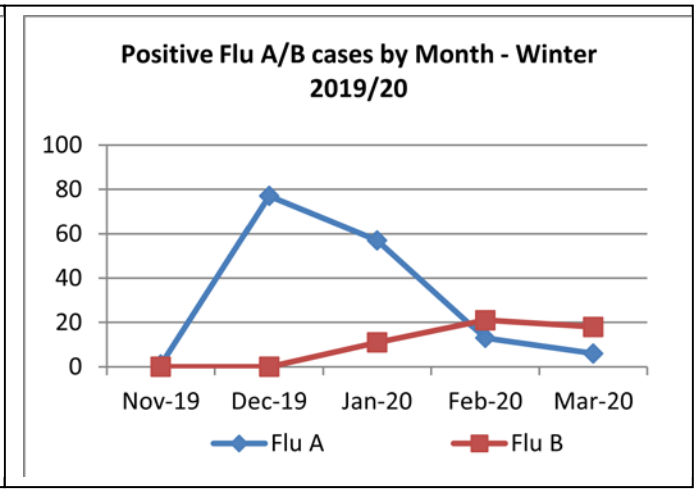
The UK saw a significant number of influenza cases during this winter, and SaTH was no exception with an unprecedented number of cases presenting to the emergency portals, which was on top of other pressures the Trust saw from acutely unwell patients. From November 2019 to March 2020, the Trust introduced Point of Care Flu testing at both sites in AMU. This allowed influenza patients to be isolated promptly and reduce cross infection.

SaTH had several wards affected, which was in line with other Acute Hospitals in the region. However, with good control measures these were mainly restricted to bay closures SaTH had no whole ward closures.

For each case immediate control measures were instituted, following the latest PHE guidance, including the use of antivirals. Affected areas were visited and assessed by an Infection Prevention Nurse at least once daily. Infection Prevention nurse also attended Clinical site bed meetings at least once daily

Overcrowding and pressures in the emergency unit and lack of side rooms across the trust exacerbated the situation and prevented early isolation in a number of cases. Nevertheless, the staff did a magnificent job in preventing further spread as best as they could, given the pressures, implementing antiviral medication as per PHE guidance to those exposed patients.





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.

At SaTH infection prevention is included in all job descriptions**.** All clinical staff receive induction and update training and education in optimum infection prevention practices. This includes volunteers. There are leaflets for contractors explaining their responsibilities and external work must be signed off by the IPC team with Estates to ensure appropriate cross infection measures such as dust control are in place.

Staff Training & Education

The IPC team deliver numerous training sessions year round, these have included programme of mandatory sessions and corporate induction days. The team have also provided bespoke training sessions on wards and in departments so staff do not have to leave the ward.

Staff Group	Infection Prevention & Control	Hand Hygiene Competence
Add Prof Scientific and Technic	96%	82%
Additional Clinical Services	86%	93%
Administrative and Clerical	100%	88%
Allied Health Professionals	81%	91%
Estates and Ancillary	81%	75%
Healthcare Scientists	100%	85%
Nursing and Midwifery Registered	85%	92%
Medical and Dental	78%	75%
Subject Total	**84%**	**88%**

Road Show 2019

The IPC team carried out a roadshow in May 2019 and November 2019. The roadshow themes were "*It's in your hands*" focusing on hand hygiene and glove awareness and MRSA and Norovirus. The IPC team visited every ward on both hospital sites. The purpose was to provide an educational opportunity to reinforce good practice and to discuss key points. We make it fun to take part by having a quiz to try and the potential to win a small prize.

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Infection Prevention and Control Team/Team Development

The Infection Prevention and Control Team have also attended several study days on different aspects of Infection Prevention & Control throughout the year, including regional and local IPS conferences and Surgical Site Surveillance Conferences.

One Infection Prevention Nurse has completed the Infection Prevention Course at Birmingham City University.

One Infection Prevention Nurses have completed the Marian Reed Development Programme Infection Prevention & Control Secretary is planning to visit local hospital (Stoke) to develop knowledge in regards to data analysis and share good practice.

All new staff to the Infection Prevention Nurses has a local induction programme to Infection Prevention.

Criterion 7:

Provide or secure adequate isolation facilities.

The average proportion of single rooms available in NHS acute trusts in England in 2016/17 was 30.2%. The average for single rooms with en-suite was 20.7% (Public Health England).

SaTH are significantly below the national average at 19.1% overall (*including* Women's and Children's) and with only 7.5% en-suite. This significantly impacts the ability to isolate all patients who should be isolated according to national guidelines, therefore when side room capacity is low; a risk assessment is completed for the appropriate allocation.

A risk assessment tool is available to help staff in making these decisions and ensuring that practice is consistent. The IPC team work closely with ward staff and Clinical Site Managers to ensure the most effective use of side rooms according to risk

The trust also has no negative pressure side rooms; the provision of these impedes the Trust's ability to care for patients with certain infections such as multidrug resistant TB.
Isolation capacity and usage of side rooms is audited twice a year by the IPC team.

	PRH		RSH		Total	
	All in-pt beds	In-pt beds excl Specialist & W&C (±)	All in-pt beds	In-pt beds excl Specialist & W&C (±)	All in-pt beds	In-pt beds excl Specialist & W&C (±)
Total In-pt beds	**434**	**313**	**431**	**431**	**865**	**744**
Side Rooms (S/R)	104	51	59	59	163	110
S/R with En-suite	64	12	19	19	83	31
Double occupancy rooms*	5 double rooms	5 double rooms	0	0	10 total beds	5 double rooms=10 beds

The COVID 19 pandemic has brought the lack of side rooms and other isolation facilities into sharp relief and we will be working with trust management to increase isolation capacity in 2020/21.

Criterion 8:

Secure adequate access to laboratory support as appropriate

Laboratory services for SaTH are located in the purpose built Pathology Laboratory on-site at both sites (Royal Shrewsbury Hospital & Princess Royal Hospital). The Microbiology Laboratory has full Clinical Pathology Accreditation (CPA)

The Infection Prevention Nurses work closely with all Consultant Microbiologists and the Clinical Scientists. Two of the consultant microbiologists have retired this year. The trust has managed to appoint a consultant clinical scientist to one of these posts and she has been heavily involved in developing the COVID 19 testing in the laboratory. The retired microbiologists are doing some part time work but we are still one WTE consultant microbiologist short. Attempts to appoint to this post have so far been unsuccessful. This reflects a shortage of consultant microbiologists UK wide. This impacts on the IPC team because the microbiologists are extremely busy and have less time available to assist with IPC.

Criterion 9:

Have and adhere to policies, designed for the individual's care and provider organisations that help to prevent and control infections

The overarching policies are written in line with the Trust Governance policy which outlines requirements for responsibility, audit and monitoring of policies to provide assurance that policies are being adhered to. Both policy and manual are available for staff to view on the Trust intranet.

The IPC have a rolling programme of policies which require updating each year. In addition policies are updated prior to review date if national guidance changes.

In 2019/20 the team updated the following IPC polices:

Avian Influenza
MERS CoV
C difficile
CPE
ESBL
Seasonal Influenza
MRSA
Norovirus
Major Outbreak Policy
Patient Placement and Movement Policy
Pseudomonas Policy
Streptococcal Infection Group A C and G
Streptococcal Infection Group B
Viral Haemorrhagic Fever

An Infection Prevention & Control A-Z of Common Infections is available on the trust's intranet. This significantly enhances the quick location of key infection prevention guidance by our front line staff in regards to infection control common infections. Staff also have a direct link from the intranet to the Royal Marsden polices on nursing procedures. The team also produced a new policy on COVID 19.

Criterion 10:

Providers have a system in place to manage the occupational health needs of staff in relation to infection.

Occupational Health services are provided by Team Prevent who carry out pre-placement health assessments including assessment of Immunisation needs and delivery of the Immunisation programme.

Seasonal Staff Influenza Vaccination Campaign

All front line staff are offered influenza vaccination to protect themselves and the patients they look after.

The annual seasonal influenza vaccination campaign for staff launched at the beginning of October 2019 and finished at the end of March 2020. This year's theme was Flu DJ (designated "jabber").The executive team received their flu jabs to encourage others and to enforce the importance of protecting ourselves, patients, friends and family from the flu.

The seasonal influenza campaign was led by IPC Team and supported by Workforce representatives, the Communication and Web Development Team, Occupational Health, Pharmacy representatives and members of the specialist nursing team.

Peer vaccinators within the Trust worked together to vaccinate both hospital sites as well as the community maternity units and the business parks. The Occupational Health department (Team Prevent) hosted some flu clinics at the start of the campaign, along with the Trust's peer vaccinators to start the Flu Season. The peer vaccinators hosted a large number of walkabouts and static clinics, engaging with lots of staff, providing information and dismissing myths around the Flu Vaccine.

A '24 Hour Jabathon" was held at both sites to ensure we captured all staff during all shift patterns. A flu hotline was also set up to capture any remaining staff.

The Communications and Web Development Team helped with communicating the important messages around Flu to staff, including myth busting. The Flu dates were published via email and the intranet, along with flyers and posters being handed around to staff. In addition to promoting, the Trust introduced an incentivised approach whereby staff received a flu jab voucher. The voucher was a £3 Café Bistro voucher.

The Flu Campaign for 2019/20 resulted in 83% of frontline health care workers getting the vaccine. The national target was 80%.

SECTION 5: IPC FOCUS FOR 2020 - 2021

- Continuing work related to the COVID19 pandemic. We will use the newly published NHS IPC Board Assurance Framework to ensure that all guidance and risks relating to this complex problem are addressed and that gaps in compliance are promptly acted on. This will be presented at IPCC and to Trust Board.
- IPC guidelines for COVID 19 will be updated continuously in line with new guidance from PHE.
- Ongoing training in appropriate use of PPE for COVID 19 continues
- Advising on decontamination of environment and equipment used for COVID 19 patients
- We are developing continuous monitoring of possible health care acquired cases of COVID 19 with rapid action to control possible clusters
- Purchasing an automated surveillance system ICNet which will assist us in identifying and acting on clusters of infections including COVID 19, MRSA, ESBL, C diff and other infections
- We will also be working with trust management to increase social distancing for staff and patients and enhance isolation capacity for patients both for patients with infection and those that need to shield against infection.
- We will take part in developing safe systems for restoration of elective activity, to allow this to continue safely while protecting patients from acquiring COVID 19
- We will be involved in planning for possible second or later waves of COVID 19 and also controlling possible simultaneous influenza and COVID 19 outbreaks over the winter months
- This will include ensuring a high level of immunisation of staff with influenza vaccine before winter. If a COVID 19 vaccine becomes available we will assist in prioritising staff and/or patients for vaccination
- Antimicrobial Resistance – Lower Urinary Tract Infections in Older People
- Achieve 90% of antibiotic surgical prophylaxis prescriptions for elective colorectal surgery being a single dose and prescribed in accordance to local antibiotic guidelines
- Continue to address and monitor outstanding estates maintenance work across the Trust
- Reduce the incidence of Clostridium difficile infection in SaTH based on a strong health economy partnership approach including surveillance, implementation of best practice, audit and root cause analysis
- Reduce Blood culture contamination rates

SECTION 6: CONCLUSION

Overall, our success is measured by our compliance with the Health Act, which encompasses all aspects of infection prevention and control, including management systems, environment, cleaning, training and policies to protect patients and staff. Our current compliance (as of 13/5/20) is very high at 95.9%. Outstanding issues include lack of an automated surveillance system, which we hope to get in 2020/21, levels of IPC training at 84%, and low levels of isolation facilities.

We have also completed 97% of our IPC program from last year. Outstanding work includes planned items from February and March which were pushed back because of pressure from the COVID pandemic. This included audits of PPE use, audits of job plans and two policies. However in response to COVID we have been undertaking a huge amount of PPE and other practice audit and training on the wards. Incomplete tasks will be addressed in the first three months of the 2020/21 programme.

The COVID pandemic has proved a huge challenge for the NHS but has also shown how well our staff are able to rise to that challenge, with all departments working together flexibly to provide a safe environment for patients and staff while dealing with many more ventilated patients than normal. Restoration of normal services will provide new hurdles and we must also be prepared for a possible second wave. While this will make up a large part of our workload for 2020/21 we also need to ensure that we keep a grip on other infections and that our staff maintain a high level of compliance with training.

SECTION 7: REFERENCE

Department of Health: The Health and Social Care Act 2008: Code of Practice on the prevention and control of infections and related guidance.

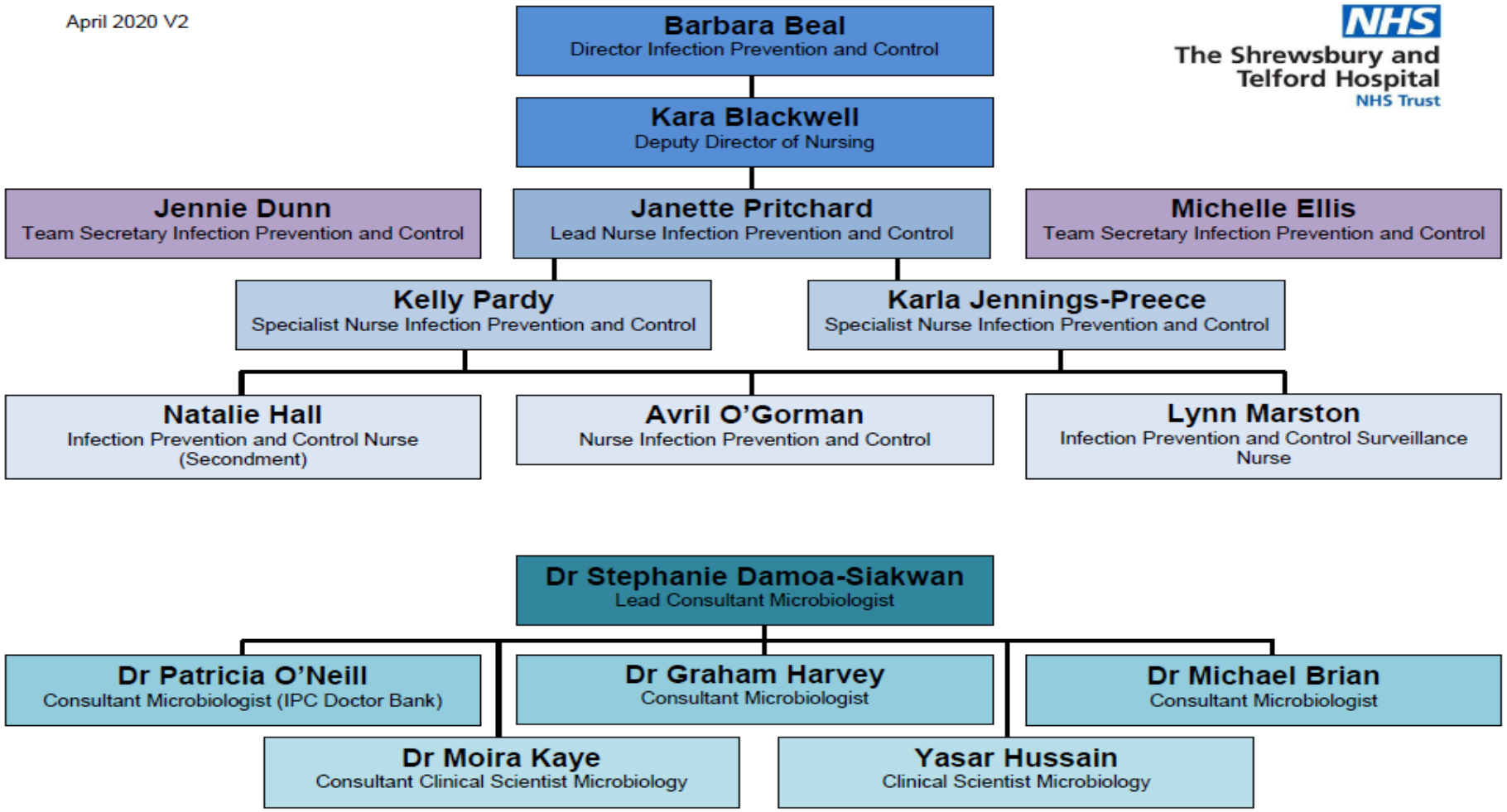
https://www.gov.uk/government/publications/the-health-and-social-care-act-2008-code-of-practice-on-the-prevention-and-control-of-infections-and-related-guidance

Department of Health: Improving outcomes and supporting transparency

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/545605/PHOF_Part_2.pdf

Infection Prevention Society Audit tools. http://www.ips.uk.net/professional-practice/quality-improvement-tools/quality-improvement-tools/

Appendix 1: Infection Prevention and Control Structure



Appendix 2: Infection Prevention and Control Committee (IPCC) Strategic Links