The Shrewsbury and Telford Hospital NHS Trust

2018/19

Infection Prevention & Control Annual Report

Report compiled by Dr Patricia O'Neill and the Infection Prevention & Control Team
Shrewsbury & Telford Hospital NHS Trust
July 2019

Foreword by Director of Infection Prevention and Control (DIPC)

Infection Prevention and Control Annual Report 2018-19

This Annual report covers the period 1st April 2018 to 31st March 2019 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.
2018/19 proved to be another busy and challenging year for the Infection Prevention and Control Team. 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 departments, which was additional to the other pressures on the Trust from acutely unwell patients.
Healthcare associated infections remains high on the media and political agenda, being seen as a visible and unambiguous indicator of quality and safety of patient care. The infection prevention agenda faces many challenges including the ever increasing threat from antimicrobial resistant micro-organisms, growing service development, national guidelines and targets/outcomes. The Secretary for Health has launched an important ambition to reduce Gram negative blood stream infections by 50% by 2021. SaTH is working closely with the Health Economy colleagues to achieve this.
This will be my last annual report as Directory of Infection Prevention and Control at Shrewsbury and Telford NHS trust as I retired in May 2019. Although I will be continue to do some work for the trust I will no longer be leading for IPC.

I have worked for the trust since 1993 and been DIPC since 2009 so have spent 10 years in this role. It has been a period of extraordinary achievements and extraordinary challenges. We sometimes forget the dramatic fall achieved in MRSA and Clostridium Difficile infections when faced with antibiotic resistance, influenza, norovirus and problems with isolation. This improvement only happened when IPC was made a responsibility of all members of staff and departments, not just the Infection Prevention and Control Team, and was very much a team effort. The IPC team has always provided the information, inspiration and perspiration to make it happen. I would like to thank everyone in the trust I have worked with on reducing HCAI, but in particular, all the IPC team staff it has been my pleasure to know over this period.

Patricia O'Neill
Director of Infection Prevention and Control (DIPC)

SECTION 1: KEY ACHIEVEMENTS OF 2018-19

- We again compared to last year, increased our Flu vaccine coverage of staff this year to 75% just falling short of the national average of 77.1%. This was due the hard work of our Occupational Health provider, Team Prevent and other nurse vaccinators employed by the trust. 4706 influenza vaccines have been given to staff at SaTH

- The target set by NHS England for Trust acquired Clostridium *difficile* cases at SaTH 2018-19 was 24. SaTH reported a total of 18 cases which is a 59.2% reduction on the previous year (2017/18) and well within the target of 24 set for the period covered by this report. Our rate per 100,000 bed days was 7.2 which is our lowest yet and well below the national average

- A collaborative work ethos with commissioners in relation to MRSA bacteraemia and Clostridium *difficile* infection root causes took place

- The Infection Prevention & Control Team successfully worked alongside Telford and Wrekin Clinical Commissioning Group. Carrying out all audits for nursing homes, GP's & Residential homes in the Telford & Wrekin Area, this consisted of compiling data reports, providing education & teaching sessions following audits. Data input for C difficile, E.coli bacteraemia cases

- Two members of IPC Team successfully completed the Marian Reed Course. One of the nurses came runner-up in the Marian Reed prize draw

- One staff member completed IPC Degree Module at level 7

- The IPC Team strengthening the outbreak policy and commenced a tailor made 'outbreak pack'

- All IPC staff have visited local trusts (Walsall, Wolverhampton & Stoke) to network and to share learning and best practice

- IPC Team have recently implemented "triage Nurse" role within IPC, which is working well to ensure collaborative working within the team and clinical areas

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

SECTION 3: INTRODUCTION

In the year 2018/19 was another year of improvements and new challenges in the continuing campaign to reduce avoidable Health Care Associated Infection (HCAI) at Shrewsbury and Telford Hospital NHS Trust (SaTH). This report summarises the combined activities of the Infection Prevention & Control Team (IPCT) and staff at SaTH

At 7.2 cases of C difficile per 100,000 bed days we were still below the national average for England in 2017/18 which was 13.7.

We continue to struggle with the increased requirement for side rooms as national guidance has changed to include more antibiotic resistant organisms in the list of those needing isolation, and managing the high patient flow.

The Trust recognises that the effective prevention and control of HCAIs 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 law there are two principles:

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

With this in mind, patient safety remains the number one priority for the Trust. Infection prevention is one of the key elements to ensure SaTH has a safe environment and practices which is reflected in the Trust '2025 Vision' and 3 years objectives and milestones – turning the vision into a reality.

In July 2018 SaTH IPC Team took over the annual programme of work for Telford & Wrekin CCG. This involved covering 25 GP's, 11 nursing homes and 11 residential homes. The team provided day to day advice via the telephone and face to face, yearly audits and follow up audit if required, education, training, RCA's, data collection and monitoring of E.Coli Bacteraemia and C difficile. Outbreaks were managed by PHE; however the team gave general management advice when needed.

The IPC team and secretary managed and reviewed data input on the CCG DCS (data capture system) on a monthly basis then providing GP's with updates regarding their figures in relation to E.Coli bacteraemia cases and C difficile.

SECTION 4: COMPLIANCE

Criteria 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 Trust Infection Prevention and Control 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. The IPC Team provided IPC advice and support to wards and departments. The team continued to support frontline staff and prioritise urgent IPC issues during winter pressures.

At SaTH the DIPC has overall responsibility for the IPC Team; however the team is managed by Janette Pritchard (Lead Nurse Infection Prevention and Control).

Dr Patricia O'Neill as DIPC works for IPC part time. She also works as a Consultant Microbiologist. In addition another three consultant microbiologists continue to provide support to the Infection Prevention & Control Team. Patricia stepped down as DIPC and in January 2019 and was succeeded by Deidre Fowler, Director of Nursing & Quality (DON)

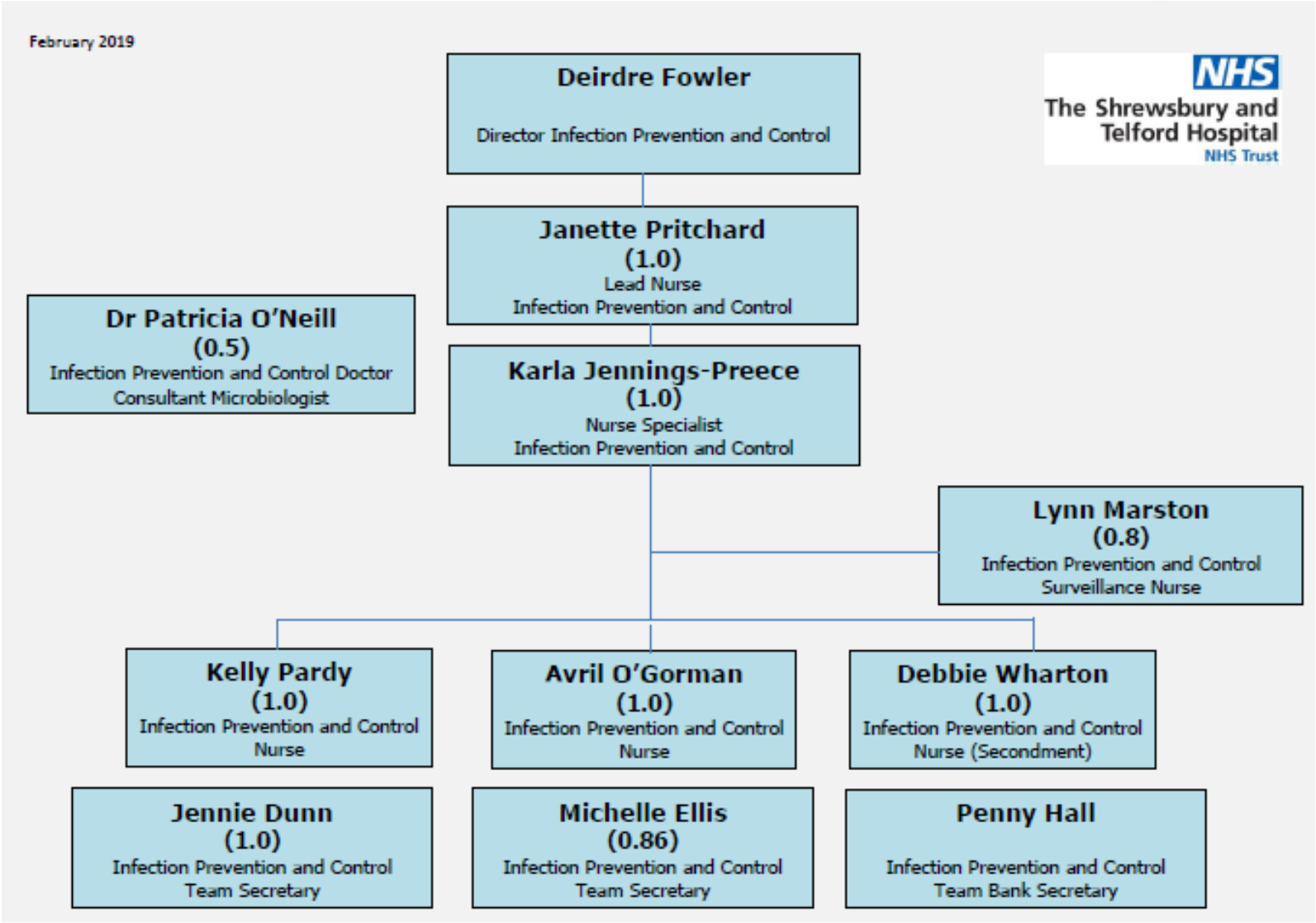
The Trust was visited by NHSI on three occasions during 2018/19 (June, November and March 2019) to review IPC practices. At each visit the Trust was Red RAG rated for non-compliance with the assessment made. To support delivery of the remedial actions required the team were supported by Lead Nurse, Helen Bucior from UHNM to ensure gaps in the personnel providing IPC leadership were addressed and delivery of care is improved and maintained.

An action plan was developed to address the concerns cross reference to the Health Act as per NHSI 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, however this has proved challenging again this year with various committee meetings being cancelled throughout the year.

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.


February 2019
Deirdre Fowler
Director Infection Prevention and Control
NHS
The Shrewsbury and Telford Hospital
NHS Trust
Janette Pritchard
(1.0)
Lead Nurse
Infection Prevention and Control
Dr Patricia O'Neill
(0.5)
Infection Prevention and Control Doctor
Consultant Microbiologist
Karla Jennings-Preece
(1.0)
Nurse Specialist
Infection Prevention and Control
Lynn Marston
(0.8)
Infection Prevention and Control
Surveillance Nurse
Kelly Pardy
(1.0)
Infection Prevention and Control
Nurse
Avril O'Gorman
(1.0)
Infection Prevention and Control
Nurse
Debbie Wharton
(1.0)
Infection Prevention and Control
Nurse (Secondment)
Jennie Dunn
(1.0)
Infection Prevention and Control
Team Secretary
Michelle Ellis
(0.86)
Infection Prevention and Control
Team Secretary
Penny Hall
Infection Prevention and Control
Team Bank Secretary

Committee Structures and Assurance Processes

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%.

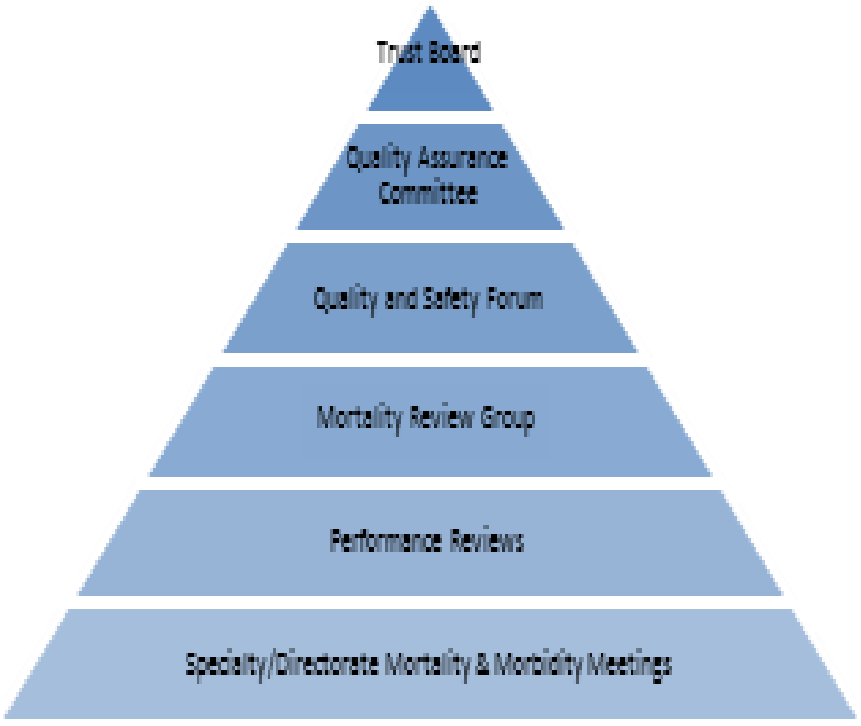
There is a separate **Local Health Economy Infection Prevention & Control and Antimicrobial Group** which is chaired by the Lead Shropshire CCG Nurse. The group meets quarterly, and has representation from all key stakeholders, including microbiologists. A regular report is submitted to IPCC.

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.

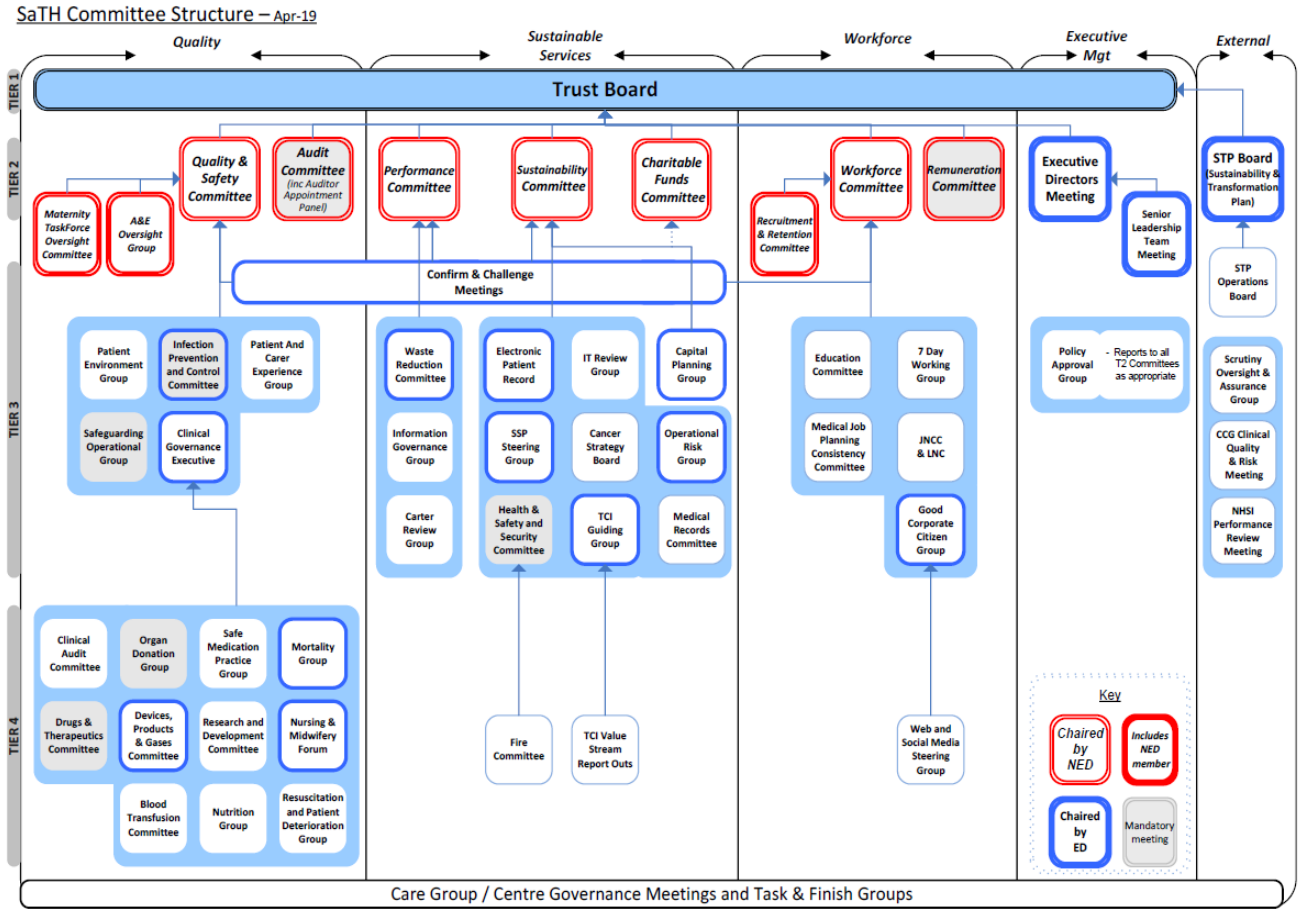
Water Safety Group

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.



Clostridium *difficile* 30 day all-cause mortality information is included in the Infection Prevention dashboard.

Infection Prevention and Control Committee (IPCC) Strategic Links



Reports/Papers Received by IPCC

Annual report	Scheduled Care report
Facilities report	Women's and Children's Care report
Cleanliness monitoring reports	Support services Care report
Review of IPC Quality Ward Walks	IPC Lead Nurse Report
IPC annual programme update	HCAI update
Antimicrobial stewardship Report	MRSA bacteraemia recovery plan
SaTH CDI Action Plan Update	NHSi Action plan
Hand hygiene competence report	Estates report
Health and safety update	PHE Update
Occupational health report	Unscheduled Care report
CDI appeal panel review	Water safety group minutes
Update on BSI action plan	IPC risk register review

Groups/Meetings Infection Prevention Team Attend

LHE IPC and antimicrobial prescribing group	BSI reduction Group
Quality and safety	Housekeepers meeting
Policy approval group	Devices and Products group
Clostridium *difficile* Multi- Disciplinary RCA Meetings	IPC link nurse meetings
Outbreak meetings	Nursing and Midwifery Forum
Site Safety meetings	Task and finish groups
Decontamination Group	Telford and Wrekin CCG meeting
Estates refurbishments and new development projects	Repatriation Meeting
Health and Safety committee	Space Utilisation Group
Operational risk group	Winter Planning Meeting
Infection Prevention and Control Committee	LHE IPCN forum
Clinical governance executive meeting	Water Safety Group

Care Quality Commission (CQC) Learning

CQC inspection was conducted from 21 August 2018 to 21 September 2018. The report provides an opportunity for learning and improvement at SaTH. Although the overall rating for the Trust was "Inadequate", the caring element of the service was rated as "good".

CQC found in some services that infection risk was well controlled, staff keeps themselves, equipment and the premises clean, they used control measures to prevent the spread of infection, however in some services not all staff were observed to be using appropriate control measure to prevent the spread of infection.

***Clostridium Difficile* Infection (CDI)**

Clostridium Difficile (C.difficile) is an anaerobic spore-forming Gram-positive rod which can cause antibiotic-associated diarrhoea and, less commonly, a severe and life-threatening disease, pseudo-membranous colitis. During C.difficile diarrhoea or colitis, the toxin produced by C.difficile can be detected in the faeces, and the infection is diagnosed when the laboratory detects this toxin. SaTH is compliant with DOH testing guidance for CDI

C.difficile is spread by the faecal-oral route. Spores in the faeces can contaminate patient's skin and hands, the environment, patient care equipment and the hands of health care workers. It is now recognised that the organism may be spread between susceptible patients and this is the most common means of acquisition. Some hospitals have experienced very large outbreaks.

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 more likely to give rise to this complication. It is rare after gentamicin, metronidazole, doxycycline or vancomycin use.

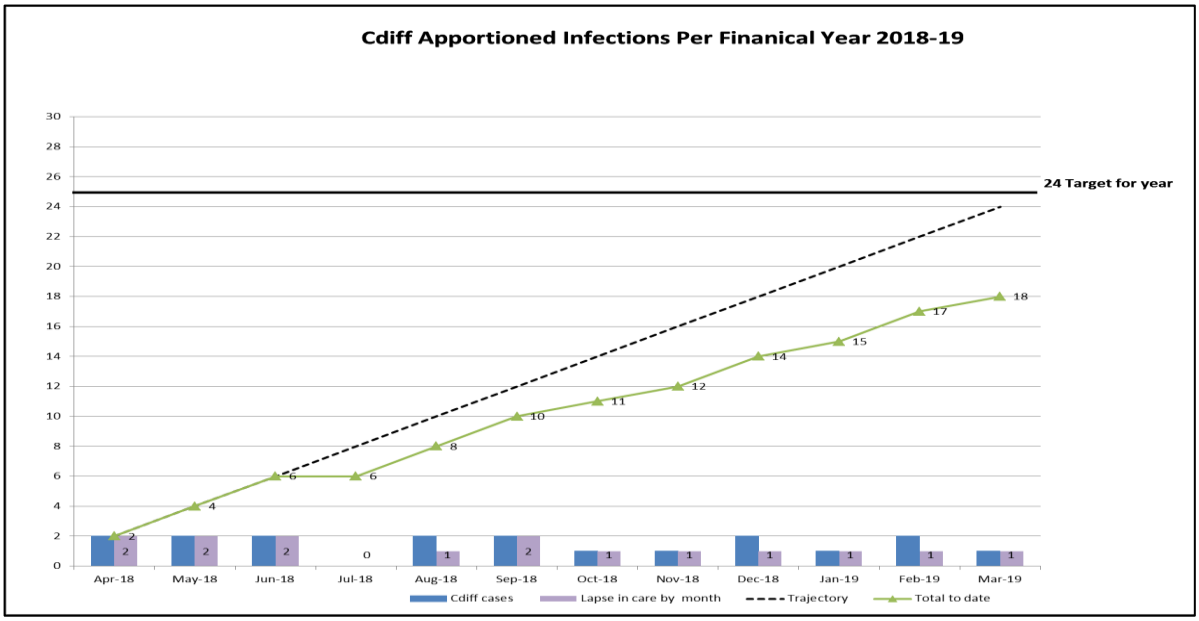
The Trust reports all cases of C difficile diagnosed in the hospital laboratory to Public Health England. However only cases where the sample was taken later than the third day after admission were considered attributable to the trust. Our target for C difficile in 2018/19 was no more than 24 trust apportioned cases in patients over the age of 2 years; this was one less than the previous year.

At end of year there were only 18 trust apportioned cases so we achieved our target. This is also a significant fall from the previous year's apportioned total of 32 cases. Last year's unusually high figure may have been due to the unavailability of piperacillin/tazobactam, which meant we had to use higher risk antibiotics such as quinolones and carbapenems. This year piperacillin/tazobactam is available again which may have in part contributed to the drop in C difficile cases. However this year we had the lowest number and rate per 100,000 bed days we have ever seen at 7.2 cases per 100,000 bed days

Of the 18 cases, 4 were considered to not have had any lapse in case. In the 14 cases where a lapse in care was identified the following causes and common themes were found:

- there were issues with cleanliness such that possible cross infection could not be ruled out
- there was a lack of appropriate antibiotic prescribing and review, including prescribing outside of guidelines
- a lack of sampling before starting antibiotics such that antibiotic could not be changed to narrower spectrum agent.
- delay in isolation

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 determine 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 NHSi.



Clostridium *difficile* Action Plan and Interventions put in place by the Trust to prevent further cases of CDI

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 the affected patient's isolation and sampling. These measures taken into account with environmental cleaning, and good hand hygiene technique and practice will help in reduce cases overall and cross infection.

In continuing to work with the clinical areas, actions have included:

- Wherever poor practice is identified as part of the investigation of a case of C difficile, an action plan is put into plan to address this immediately. Common problems are fed back through, the clinical governance meetings.
- Monthly "lessons learnt" are published to the trust ward managers, matrons, Head of nursing as well as those trust board members. This is a collective anonymous review of findings of what could we have done better in relation to what we did well.
- Attendance at IPC mandatory training has been encouraged however this suffers during the winter months when clinical pressure is very high due to bed capacity and staff availability.
- Monthly hand hygiene audits continue. We also assess technique in doing hand hygiene regularly (now in place for doctors also)
- Antibiotic stewardship (audits of prescribing but also all antibiotic prescriptions are checked by pharmacy staff to ensure they are in line with guidelines). All antibiotic prescriptions should also be reviewed within 72 hrs and we are continuing to working towards this target.
- Monitoring environmental cleanliness through daily domestic supervisor monitoring (all wards are routinely cleaned with a chlorine based disinfectant once a month on top of routine cleaning), weekly and monthly ward manager audits, multidisciplinary walkabouts (matrons, estates, domestic services, IPC), quality ward walks by IPC staff.
- In 2018/19 the trust now has two hydrogen peroxide fogging machines which will be used to give additional higher grade decontamination of the environment after patients with high risk infections, including C difficile are discharged.
- Reinforcing the need for rapid testing and isolation via stat training and link nurses, and reminding staff of need to escalate to site managers if no side room is available. This also being highlighted through using the trust DATIX system.
- The trust recognises that education is a major component in helping to promote the prevention of Clostridium *difficile* within the Trust. Statuary training discusses the earliest identification of C.difficile patients and risk factors involved.

The Trust actively recognises those cases that arise in the community and that may well relate to previous antibiotic treatment or potential cross infection during a recent stay in hospital. We routinely check whether patients in the community with C difficile have been in hospital in the last 30 days and if so this is reported back to the care group where the patient was treated. If we see linked cases we investigate them further to see if cross infection has occurred.

Clostridium *difficile* toxin positive cases and of those cases that are symptomatic Clostridium *difficile* carriers are proactively isolated in the proactive response to the prevention and control of infection within the trust.

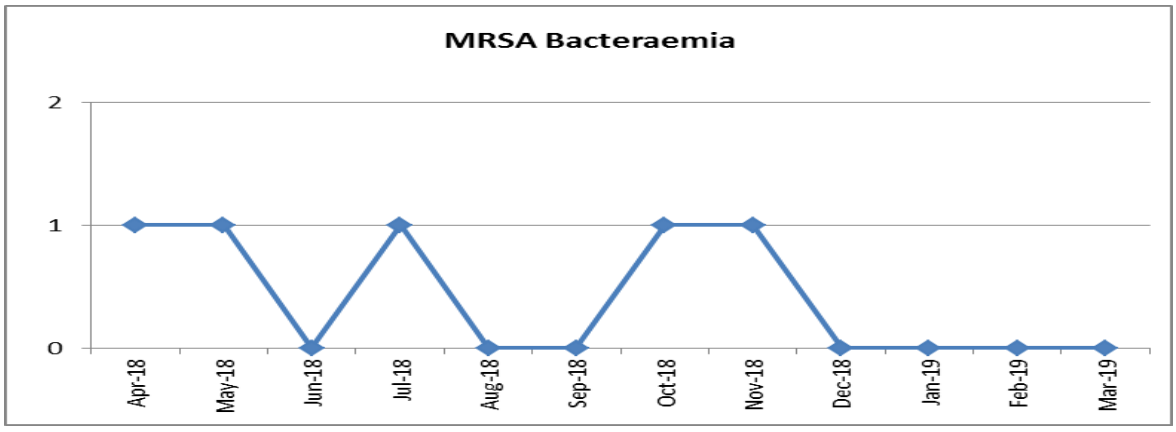
A CDI weekly review by Consultant Microbiologist as well as telephone contact is encouraged to ensure that medical/ surgical teams are aware of best practice in reviewing the symptomatic/ positive cases as well. The microbiologist is accompanied by an IPCN who will also relate / update ward staff on treatment changes etc.

All patients with CDI are provided with an information leaflet which contains the Clostridium *difficile* passport (green care), this card is for the patient to keep and then show to any doctor, pharmacist, dentist or healthcare provider

Where there are two or more cases identified in a clinical area within a 28 day period these are submitted to public Health England for ribotyping. Samples found with the same ribotype are then examined further by way of VNTR. This helps to identify wards or areas where patient to patient transmission has likely to have occurred, with enhanced focus on control measures, with decanting and deep-cleaning of the patient areas if necessary.

As from April 2019 national guidance is that any case diagnosed in the community or immediately after admission to the trust that have been an inpatient in the trust in the past 4 weeks will be investigated in the same way as our current trust apportioned cases. This will allow us to further identify common issues and prevent more cases of C difficile caused by the trust

MRSA Bacteraemia
In 2018/19 there was 5 trust apportioned MRSA Bacteraemia cases (this is against a target of 0). 4 of these cases 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.



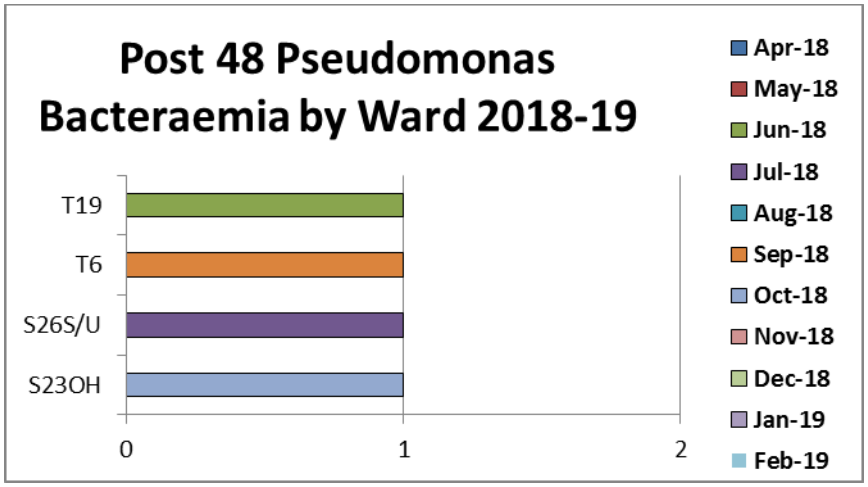
Carbapenemase – Producing Enterobacteriacea (CPE)
Public Health England published a toolkit for the early detection, management and control of CPE in December 2013. The toolkit provides expert advice on the management of CPE to prevent or

reduce the spread of these bacteria into (and within) health care settings, and between health and residential care settings.

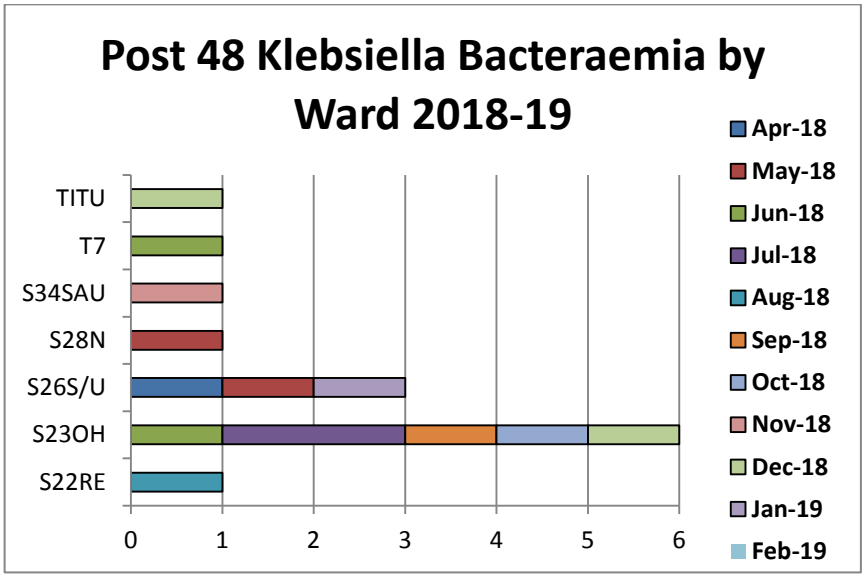
The Trust has a CPE policy in place. This reflects screening guidance recommended by Public Health England.

2018-19 the trust had 9 Cases of CPE 5 of those cases were attributed to the Trust.

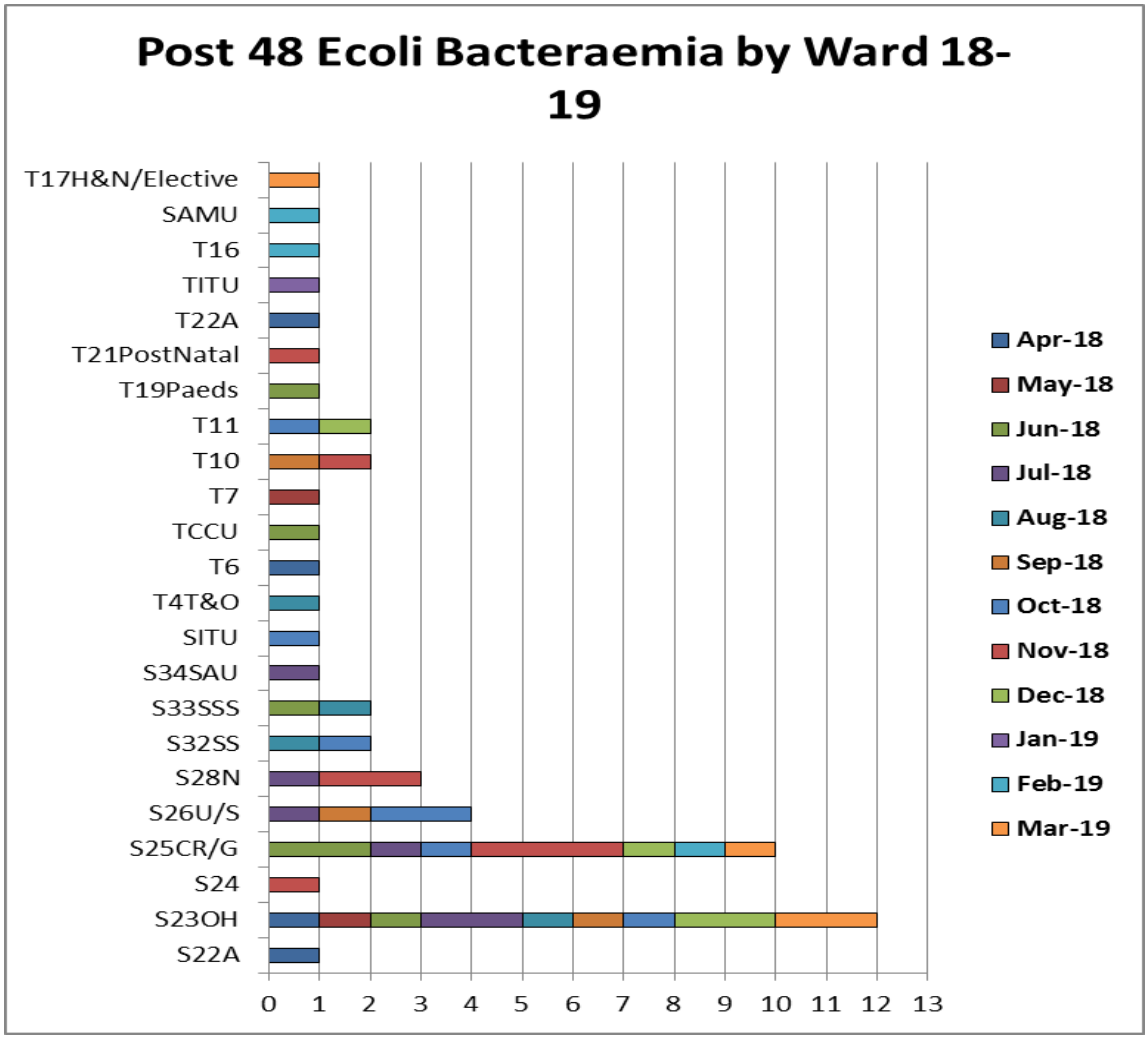
Gram Negative Blood Stream Infections



In 2018/19 we had 4 trust apportioned Pseudomonas cases, compared to 10 cases in 2017/18.



In 2018/19 we had 14 trust apportioned Klebsiella Bacteraemia cases, compared to 20 cases in 2017/18.



In 2018/19 we had 52 trust apportioned Ecoli bacteraemia cases, compared to 37 in 2017/18.

In 2018/19 there was 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.

SaTH are working collaboratively with their local health economy group, which incorporates partners in the community, to further expand the work that is required to prevent Gram negative infections by focusing on the risk factors set out above. To date or most of the work has been to reduce urinary catheter related infection not just within the hospital setting but also that in the community. The introduction of a catheter card which is given to every patient who is catheterised as a way of communication and alerting others of this invasive device has been well received and discussed regionally. Hydration and Hand hygiene incorporated into the IPC teams road shows" UTI...URINE TROUBLE" was well received within the acute trust and provided on the floor education to the awareness of catheters, early review and hydration.

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 provide assurance around practice and 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. The audit tools for general ward areas have been revised during 2018-19 ensure audits are relevant to that Clinical Area.

The IPT also completed enhanced audits where infection numbers are highest or where there appears to be an identified risk concern so improvements in the care process can be identified quickly and put into action.

In 2018-19 the IPC team conducted a quality walk on each ward and department each quarter. The ward walks assessed aspects of cleanliness, environment and equipment, management of infectious patients, isolation and invasive devices. If an area did not meet acceptable standards on 2 consecutive visits, the area was put on "enhanced monitoring" which involved regular visits to the area by the IPC team to identify and rectify areas of concern. These areas then had 3 monthly Quality walks to monitor improvement.

As of April 2019, this 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 so far as the actions are much more manageable.

Audits of Hand Hygiene Practice
Effective hand hygiene is the single most important procedure for significantly reducing/preventing the spread if infection. It is an essential practice for patient safety. Therefore Hand hygiene remains central to the audit programme
A hand hygiene audit is used to assess hand hygiene techniques being performed within healthcare settings. It aims to prevent the spread of infection between healthcare workers and patients through observational inspections.

Hand hygiene audits are conducted by ward staff and IPC; they assess both technique and the WHO "5 moments of hand hygiene".
An external audit is also undertaken by a representative from GOJO quarterly that assesses technique and the 5 moments

The simplest and most effective solution is for healthcare workers to practice proper hand hygiene techniques during the 5 moments of hand hygiene. The trust and IPC team perform regular hand hygiene audits to identify training gaps and remind staff of the importance of basic infection control. The very principles of which are educated at induction and statuary training. During 2018 -19 an external observer was regular invited to participate and provide evidence regarding compliance of hand hygiene on the wards. This information was also then fed back to ward managers to compare with their hand hygiene audit results.

Audits are completed Bi monthly by wards. The emphasis being that if the compliance rate is below 95% audits should be completed weekly until 95% compliance is achieved.

Audit results are sent to the clinical audit team for analysis. The outcomes are presented in a report which is sent to the Head of Nursing / Clinical Manger, /Governance manager/Corporate Nursing/ Infection Prevention and Control team Nurse managers/Matrons and Ward/Department Manager by clinical audit.

A copy should be kept on the ward/ department and staff should be aware of the compliance rate. Results should be monitored by Ward department manager and Matron and reported through IPCC if hand hygiene non-compliance is an issue.

The Trust continues to focus on four main components:

- Alcohol hand rubs at the point of care, prominently positioned near each patient so that hands can be cleaned before and after care within the patient's view.
- Audit of Hand hygiene and the monitoring of compliance above 95%.
- Patients are encouraged to challenge and prompt staff if they have any doubts about hand hygiene and in cases of repeated non-compliance, escalation of concerns.
- Raised awareness of hand hygiene through education, and the 'Bare Below the Elbow' dress code which has been adopted nationally as best practice.

Staff Information

- Alert organism surveillance is reported to the organisation by the Infection Prevention Nurses daily.
- Data is produced as a HCAI, this includes information on MRSA, Clostridium *difficile*, ESBL, VRE and MGNB. This information is used to update IPC ward data graphs which are sent to ward managers within the trust monthly, which the information can be used on wards own dashboard.
- IPC team promotional activities have been held throughout the year promoting infection prevention with good practice being targeted at staff within the Trust. Such as our bi-annual road show.
- Intranet: IPC Team continues to make use of the intranet for providing staff with an easy access portal for information, policy guidance and IPT contact details. This information is regularly updated.
- Diarrhoea and Vomiting (D&V) monitoring pack is available for all ward areas via the trusts intranet. The pack includes everything that staff requires to help manage outbreak, including a Bristol stool chart and a D &V monitoring form.
- Posters displayed throughout the Trust. These provide key infection prevention messages and actions for staff, public and visitors. Leaflets are available for staff and visitors on the trust's intranet.
- A-Z of common infections has been devised for staff to easily access via the intranet, which advises on isolation, cleaning, patient information, dirty linen procedures, visitor information and hand contamination.
- Updates of policies are done yearly as per annual programme

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.

Twice per year the IPC team complete a "Roadshow" where we visit each ward to provide training on a particular topic, this year the team focused on winter illnesses and isolation and also Hydration, catheter care and UTI's.

Seasonal Staff Influenza Vaccination Campaign
Seasonal influenza staff vaccination campaign is well established at SaTH

Bed Management and Movement of Patients
The IPC team work closely with the Clinical site team to ensure that patients are placed appropriately to minimise the risk of cross infection. The IPC team have produced an isolation risk assessment tool to aid the decision making process when prioritising side rooms.

Criteria 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 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 is reflected in the Environmental Audit scores and our Patient-Led assessments of the care environment (PLACE) results. The Trust monitoring team use a the MiCAD/C4C (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, 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, Matron's 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 April and June 2018. 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.
Audit Cleanliness scores at SaTH for PLACE 2018 are as follows,

RSH 99.89%,PRH 100%, Overall Score 99.95% against National Average of 98.47%, 2017 Average 99.72%.

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.

Food Hygiene Inspection
The following inspection /audits were carried out for the year 2018/2019

1. Main Kitchen Food Safety audits/inspections [Trust Food Safety Adviser.]
2. External Food Safety Inspections [Environmental Health Officers (EHO) from Telford and Wrekin Council and Shropshire Council].

3. Ward Kitchen food safety spot checks [Trust Food Safety Adviser.]
4. Exemplar Ward Kitchen assessments [Trust Food Safety Adviser.]

1. Main kitchen Food Safety audits/inspections [PRH 9th October 2018 RSH 31st January 2019]

These audits are unannounced and identify non-compliances with:-

- Food Safety Practices & Procedures
- Structure, Equipment and Cleanliness
- Food Safety Management System[Hazard Analysis Critical Control Point (HACCP)]

Planned inspections with the catering management team are also carried out to check on progress of internal and external audit action plans. Catering Management Team are currently redesigning and implementing supervisory and management inspection templates to be carried out every two weeks by supervisors and monthly by Catering Operations Managers. Allergy Audits are carried out by the catering management team once a month

2. External Food Safety Inspections -RSH 6th March 2019.

EHO unannounced inspection of the main kitchen and 3 ward kitchens [wards 23, 24 and SAU].

The Food Safety Rating for RSH main kitchens and ward kitchen has now improved from level 4 to level 5 .Café Bistro [RSH] has also be confirmed again at Level 5

7 non-compliances were identified.
[3 - Legal Requirements and 4 Recommendations.]

Catering non-compliances:

- Hygiene and Safety:- [1 Legal and 1 Recommendation]
- Structure:- [1 Legal]
- Management Control:- [2 Recommendation]
-

Ward Kitchen non-compliances:

- Hygiene and Safety:- [1 Recommendation]
- Management:- [1 Legal]
  This was in relation to the completion of food safety documentation at ward level which has been identified before in previous EHO inspection reports at both hospital sites and has also been identified in Exemplar ward kitchen assessments and ward kitchen food safety spot checks.

Efficient and accurate record keeping is essential to demonstrate both food safety and successful application of food safety management and provide evidence for due diligence to prove that all reasonable and satisfactory precautions have been taken.

Lead Nurses, Matrons and ward Managers are currently responsible for their ward kitchens and completion of food safety documentation at ward level. They must ensure the resources are available to ensure ward kitchen food safety documentation is completed on all their wards every day.

However it is important to note that one of the recommendations in the report for Catering [Ref 6] states the following.

"Should food operations change, it is advised due to historical record keeping inconsistencies at ward level, critical food records be maintained by core catering staff."

A new patient and commercial food service is soon to be introduced later this year at RSH which is the same as PRH [Cook chill cook freeze].

It is anticipated that [Ref 6] will be addressed at this point. This is essential as the Trusts food safety rating may be detrimentally affected for any further non-compliances in the future.

NB This matter will also need addressing at the PRH site as well.

The CEO Mr Simon Wright has responded to the EHO inspection report with an action plan and supporting documentation which has been circulated to Catering management and through Corporate Nursing to all lead Nurses, Matrons and Ward Managers.

This action plan has been presented to the Trust Health Safety Security Committee and progress on completion is being monitored through this committee.

The next formal EHO inspection at PRH is now imminent at both sites.

Water Safety Group
The Water Safety Group is a sub group of IPCC and meets quarterly, reporting directly to IPCC. The Water Safety Group is chaired by the DIPC.

Management of Decontamination
Management and compliance currently falls into three distinct areas i.e.

- Medical Engineering Services – for medical device reprocessing equipment. SaTH provides Estates Services management responsibilities within the PFI contract.

- Medical Engineering Services – for monitoring/audit of compliance of medical devices with Trust Policies

- User – to comply with Trust Policies and to ensure all decontamination equipment within their area is fit for use and subject to periodic testing and maintenance.

The Decontamination Group is a sub group of IPCC and meets quarterly, reporting directly to IPCC. However these meetings have been cancelled several times.

Refurbishment Projects
The IPC Team provided advice on a number of refurbishment projects throughout the Trust.

Refurbishments
A number of clinical areas at SaTH have undergone planned refurbishment works during this financial year.

- Estates annual Preventive Planned Maintenance Work programme
- Fire precautions works at Royal Shrewsbury Hospital
- Pharmacy/Dispensary work at Royal Shrewsbury Hospital

Additional Beds

- Maternity converted in a 30 bedded ward

Criteria 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.

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 results of the audits and any issues highlighted are shared with clinical governance leads monthly who are tasked with raising at clinical governance
- 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.

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 in 2018-201. Aztreonam injection was once again intermittently available throughout the year. Worldwide manufacturing and capacity issues resulted in shortages with vancomycin, gentamicin, tobramycin, mupirocin, and co-trimoxazole. 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.
- Aztreonam and tobramycin were conserved for those patients where an alternative was not an option, for example due to patterns of resistance, co-morbidities, or side effects.

Sepsis/AM CQUIN Summary (part 2c review of antibiotics and 2d antibiotic consumption) 2018-2019

Sepsis and AMR CQUIN Part 2c:

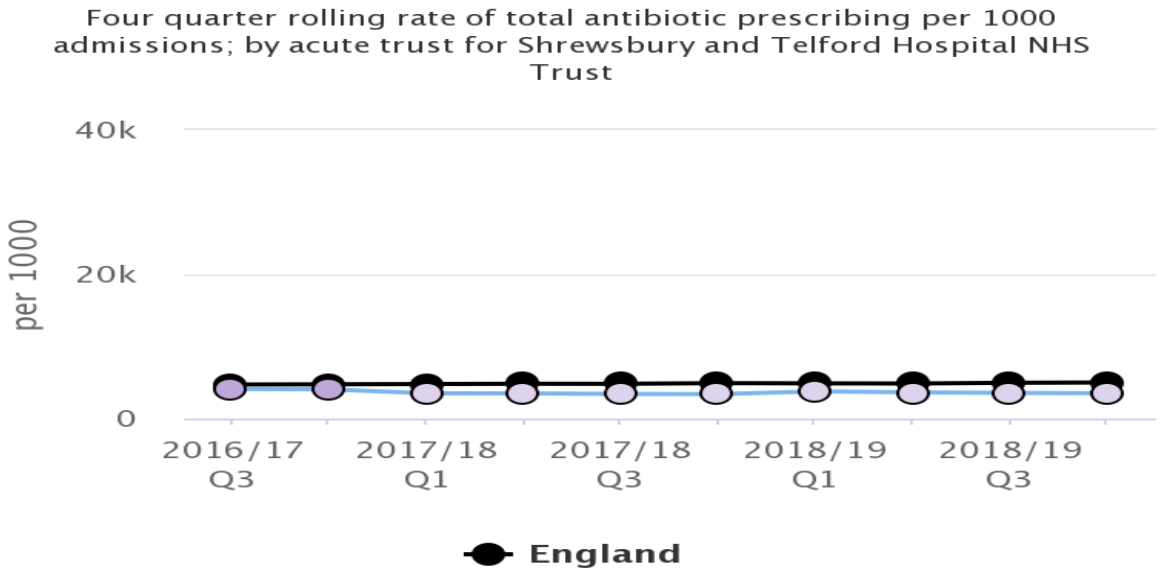
The proportion of our patients with sepsis who are being treated as per best practice as defined by the CQUIN improved compared to last year. However there is still room for further improvement

- 78% of eligible patients admitted to the emergency department were screened for sepsis compared to the national average of 93.7%
- 61.5% of inpatients classed as having sepsis were treated with antibiotics within the hour compared to the national average of 76.5%
- 72.9% of patients seen in the emergency department classed as having sepsis were given antibiotics within the hour compared to the national average of 76%

Documented review of antibiotic within 72 hours remains an issue at SaTH. Only 42% had all the elements stipulated in the CQUIN documented compared to the national average of 92.4%. This area is subject to on-going education with prescribers

Sepsis and AMR CQUIN Part 2d:

- Antibiotic consumption is measured as Defined Daily Dose (DDD) per 1000 admissions.
- SaTH continues to be a lower than average user of antibiotics
- However a reduction in consumption continues to be challenging as we treat increasingly frail and elderly patients.



Criteria 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 to guide 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.

Criteria 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, AmpC, VRE or Carbapenemase producing multi-resistant Gram Negative Bacilli, Flu and blood bourne viruses. 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 and follow-up patients appropriately and to prescribe appropriate empiric antibiotics if antibiotic treatment is indicated.

Surgical Site Infection Surveillance (SSISS)
SaTH have continued to participate in the Public Health England (PHE) National Surveillance Program. 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 SSI over time and against a national benchmark rate, this information is used to review and guide clinical practice.

Surgical Site Infection Surveillance Scheme (SSISS) 2018/2019
During 2018-19 SaTH participated in the following PHE Surgical Site Surveillance:

SSI SURVEILLANCE 2018-19		
QUARTER	**PERIOD**	**SURVEILLANCE**
1	Apr – Jun	Total Hip Replacement & Total Knee Replacement, Repair of Neck of Femur, vascular, Abdominal Hysterectomy
2	Jul – Sep	Total Hip Replacement & Total Knee Replacement, Repair of Neck of Femur, vascular, Abdominal Hysterectomy.
3	Oct – Dec	Total Hip Replacement & Total Knee Replacement
4	Jan – Mar	Total Hip Replacement & Total Knee Replacement

It remains a mandatory requirement for all acute trusts to submit data for the surveillance of surgical site infections. Public Health England (PHE) collate all the data and require that each NHS Trust carries out surveillance for a minimum of one orthopaedic category over one surveillance period (3 month/Quarter) each financial year. The data can then be used as a benchmark allowing individual Trusts to compares their rates with other hospitals.

The team collect local evidence of surgical site wound infections which develop whilst the patient is in hospital or once discharged home. This continues for 30 days postoperatively (if implant in some cases 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 considered through a Root Cause Analysis

(RCA). This ensures a robust process is in place for the identification of any surgical site infection and identifies where improvements can be made in clinical practice and aids effective and thorough reporting back to PHE as often just one infection can take us above the National Benchmark due to low total surgeries per category.

Within the 2018-2019 financial periods the following surveillance was completed at SATH.

Type of Surgery	Qtr.	No. of ops	No. Inpatient Readmission Infections (%)	National infection Rate	No. Eligible for post discharge	Return rate %	Post Discharge infections
Neck of Femur RSH	1	92	0 (0%)	1%	88	83%	1
Neck of Femur	1	61	1 (1.6%)	1%	59	84.7%	0
Vascular RSH *	1	43	2 (4.7%)	2.5%	40	82.5%	1
Total Hip Replacement	1	61	1 (1.6%)	0.4%	58	86.7%	1
Abdominal Hysterectomy	1	36	0 (0%)	1.3%	36	72.2%	0
Total Knee Replacement *	1	49	3 (6.1%)	0.4%	48	74.5%	1
Neck of Femur RSH	2	84	0 (0%)	2.5%	76	85.5%	2
Neck of Femur PRH	2	63	0 (1%)	1%	63	76.2%	1
Vascular RSH	2	55	1 (1.8%)	2.5%	52	86.5%	4
Total Hip Replacement	2	57	0 (0%)	0.4%	56	80.3%	1
Abdominal Hysterectomy	2	35	0 (0%)	1.3%	35	62.9%	0
Total Knee replacement	2	48	0 (0%)	0.4%	48	81.3%	1
Total Hip Replacement *	3	66	1 (1.5%)	0.4%	60	83.3%	1
Total Knee Replacement	3	28	0 (0%)	0.4%	27	88.9%	2
Total Hip Replacement	4	9	0	0.4%	n/a	n/a	n/a
Total Knee Replacement	4	7	0	0.4%	n/a	n/a	n/a

January to March 2019 has only been surveyed in house due to low numbers of surgeries.

Over the year we received three high outlier letters during this period for Total Knee Replacements, Total Hip Replacement and Vascular surgeries.

A root cause analysis has been carried out on all 3 infections and the consultants were involved in this process. On analysis of the RCAs, no similarities between the 3 cases have been found other the each patient having multiple co-morbidities.

These infections were all classified as deep infections and grew different organisms to each other.

All 3 patients received appropriate antibiotic cover and skin preparation for their procedures. Previous to the April-June 2018 quarter, we have not had a surgical site infection in knee prosthesis since the January-March 2015 quarter and have not seen another since the April-June 2018 quarter.

Infection prevention and control quality ward walks have been carried out on the elective orthopaedic ward and theatre recovery, for the last 2 visits both areas have maintained above the acceptable standard of 80%.

The matron for the elective orthopaedic ward is involved in improving compliance in hand hygiene audit scores and progress has and will continue to be reported back to the Infection Prevention and Control Committee on a monthly basis until these scores have improved.

We have also introduced routine MRSA groin swabbing in addition to nasal swabs at pre-operative assessment for implant surgery.

We are conducting continuous surveillance in this category and will investigate any inpatient/readmission infections we have.

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 addressing the April-June 2018 quarter on 12/12/2018, addressing the last 4 quarters on 04/03/2019 and most recently the October to December quarter on 14/5/19.

Although as a Trust we have completed more surveillance than the mandatory requirement due to lack of specialist and trained team members currently available to carry out the surveillance. Currently there is only 0.3WTE to coordinate, compile and manage this surveillance and with the addition of GIRFT (Getting it Right First Time) Audits and surveillance being added in 2018/2019 increased participation and cooperation with theatres and clinical wards will be necessary going forwards.

Link to Public Health England 2017-2018 complete report from all NHS Trusts participating 2017/2018

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/765967/SSI_annual_report_NHS_hospitals_2017_18.pdf

The trust currently do not have sepsis nurses, however following a recent CQC visit a sepsis Nurse will be implemented for 2019-20.

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 table below summarises the ward closures in the Trust during 2018/19 due to norovirus

Ward	Symptoms	Confirmed Organism	No. of Patients affected	No. of Staff affected	No. of samples tested	No. of confirmed causative organism	Symptoms first reported	Outbreak Over
S24CCU	D&V	Norovirus	20	5	7	7	16/03/2019	29/03/2019
S27	D&V	Norovirus	17	5	8	4	18/03/2019	01/04/2019
S28	D&V	Norovirus	29	2	8	6	17/03/2019	02/04/2019

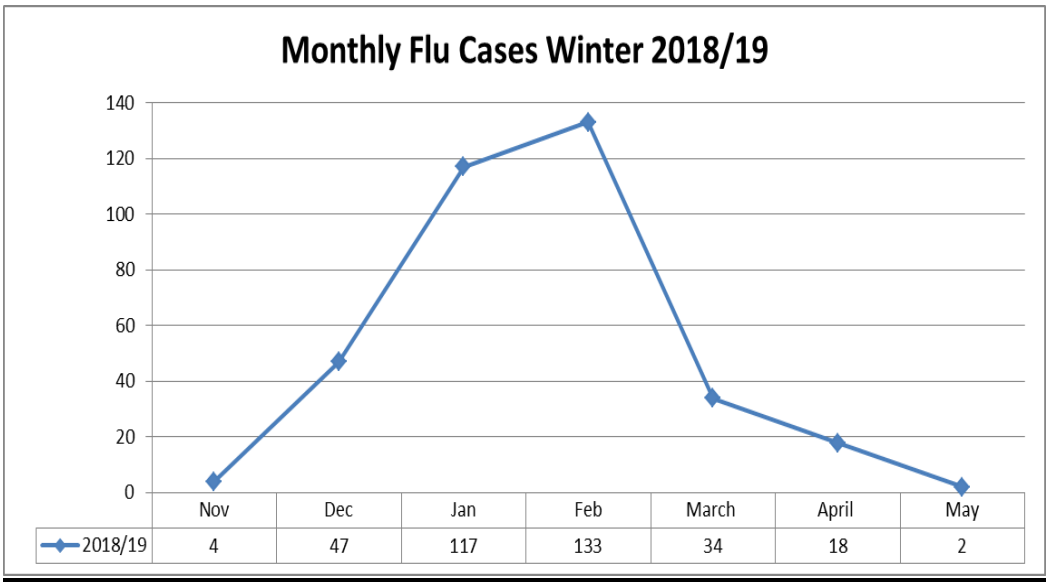
Seasonal Influenza

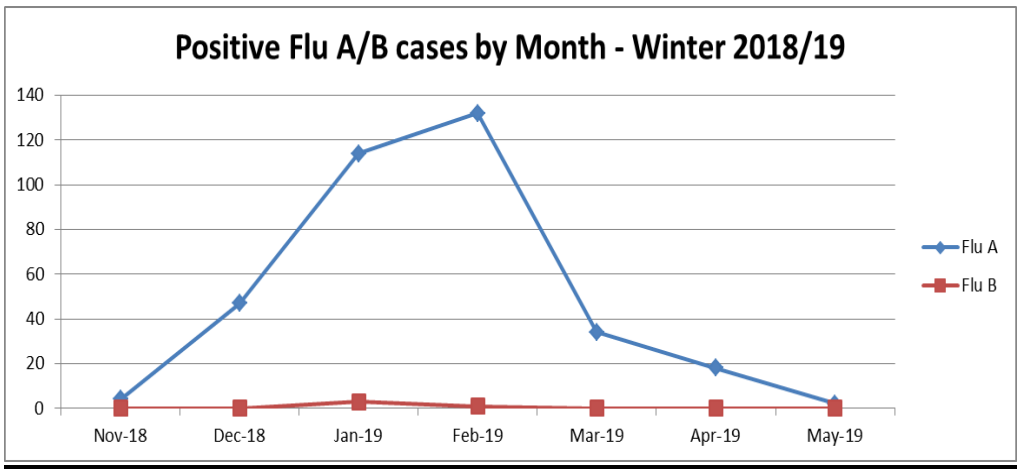
The UK saw a significant number of influenza cases during this winter, and SaTH was no exception with an unprecedented number of cases presenting to the emergency portals, which was on top of other pressures the Trust saw from acutely unwell patients.

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.





Carbapenemase Producing Enterobacteriaceae (CPE)
Control measures have continued, including a deep clean with chlorine based cleaner (Tristel) and enhanced CPE screening for admissions, followed by weekly screening. The situation is being closely monitored for any new cases since the enhanced cleaning processes and statuary training, together with an action plan has been put in place.

Surveillance continues and control measures appear to have significantly reduced any possible transmission.

Criteria 6:

Systems to ensure that all care workers (including contractors and volunteers) are aware of the discharge 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 training and education in optimum infection prevention practices.

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

The annual seasonal influenza vaccination campaign for staff launched on 2nd October 2018 and finished at the end of March 2019.

The Launch of the Flu Campaign, took place on the day of SaTH's Annual Leadership Conference. The Peer Vaccinators set up a static flu clinic in the reception of where the Conference was held and this was advertised to the whole Trust. On this day, the Executive Team received their Flu Jabs to encourage others and to enforce the importance of protecting ourselves, patients and friends and family from the Flu.

The seasonal Influenza group consists of Workforce representatives, the Communication and Web Development Team, Occupational Health, Pharmacy representatives and members of the specialist nursing team and Infection Prevention Control.

This year we had 12 trained peer vaccinators within the Trust who worked together to vaccinate both The Royal Shrewsbury Hospital and The Princess Royal Hospital, as well as the community MLU's and the business parks. This year, the peers undertook the E-Learning Flu Immunisation Training Programme, which is in partnership with Public Health England. This training was introduced for established vaccinators to gain refresher training.

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 peers hosted a large number of walkabouts and static clinics, engaging with lots of staff, providing information and dismissing myths around the Flu Vaccine.

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 allowed the member of staff to receive a free bottle of water and a piece of fruit from the restaurants, which helped to increase awareness around the Flu Jab and Health and Wellbeing.

Vaccination clinics were available until the end of February, with additional clinics from Team Prevent arranged to help pick up any staff that had not been able to have their Flu Vaccine.

The Flu Campaign for 2018/19 achieved its target of vaccinating 75% of frontline health care workers.

Criteria 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.

An isolation risk assessment tool is available to aid in the prioritisation of side room allocation.

	PRH		**RSH**		**Total**	
	All in-patient beds	In-patient beds excluding Specialist & W&C (±)	All in-patient beds	In-patient beds excluding Specialist & W&C (±)	All in-patient beds	In-patient beds excluding Specialist & W&C (±)
Total In-patient beds	**478**	**339**	**449**	**384**	**927**	**723**
Side Rooms (S/R)	108	70	66	55	174	125
S/R with En-suite	45	16	19	19	64	35
Double occupancy rooms*	5 double rooms	5 double rooms	0	0	10 total beds	5 double rooms=10 beds

Criteria 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 Scientist.

Criteria 9:

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

An Infection Prevention & Control A-Z of Common Infections has been designed and is available on the trust's intranet. With an overarching of policies in place at SaTH this significantly enhances the quick location of key infection prevention guidance by our front line staff in regards to infection control common 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.

Clinical Governance has produced a directory of policies alerting when policies are due for update, policies are also updated prior to review date if guidance is updated.

Criteria 10:

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

All job descriptions include infection prevention responsibility and this message is reiterated during mandatory training. The IPC Team participate in mandatory updates for all staff groups (clinical and non-clinical). The IPC Team regularly meet with representatives of the Occupational Health Service to ensure compliance with Criteria 10.

Staff Training
This has been documented earlier in this report.

IPN/Team Development
IPT 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.

Two Infection Prevention Nurses have completed the Marian Reed Development Programme Infection Prevention & Control Secretary has visited local hospital (Stoke) to develop knowledge in regards to data analysis and share good practice

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

One Infection Prevention Nurse has attended SaTH in house training days e.g. Appraisal training and has started Lean for Leaders programme and Coaching for Leaders course

Educational sessions between IPT and Microbiologist were held.

The IPC Team has successfully managed Telford and Wrekin CCG work load. This included auditing, data collection, education, IP advice and face to face assessment of all GP practices, Residential and nursing homes.

SECTION 5: CONCLUSION

Over the last 12 months the IPCT have ensured a high quality and effective service across the whole trust. The IPCT adopted a zero tolerance approach to HCAIs and ensured all staff in the Trust are aware of their responsibilities in relation to IPC. Delivery of Infection Prevention and Control service is unpredictable & can challenge service delivery. During winter months for example outbreaks of Influenza or 'Winter vomiting' virus can increase workload suddenly with little warning, therefore the Annual Programme of work is designed for flexibility and if necessary project dates may need to be reallocated.

Our focus for 2018/19 has been:

- Urinary Tract Infections (UTIs) are the most common healthcare associated infection in acute hospitals. The risk of developing a catheter associated urinary tract infection (CAUTI) increases the longer a urinary catheter remains in situ. The IPC Team will continue to support the urology specialists nurses aim to develop a campaign to reduce UTIs.
- Continue to 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
- Ensure cleanliness issues within wards and departments is a priority and review basic standards of practice such as cleanliness and use of commodes in the environment
- Strengthen governance around decontamination of instruments/equipment of and continue to work with the decontamination lead to focus on outstanding issues.
- Reduce blood culture contamination rates Emergency portals

Our focus for 2019-20 will be:

- Antimicrobial Resistance – Lower Urinary Tract Infections in Older People
- Achieve 90% of antibiotic prescriptions for lower UTI in older people meeting NICE guidance for lower UTI (NG109) and PHE Diagnosis of UTI guidance in terms of diagnosis and treatment.
- Antimicrobial Resistance –Antibiotic Prophylaxis in Colorectal Surgery
- 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
- In addition to the CQUINS the requirements for antibiotic consumption reductions have now been transferred into the national contract so there will be a requirement to achieve a 1% reduction in consumption year-on-year
- Continue to 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
- Flu CQUIN 80%
- Blood culture contamination Emergency portals
- To ensure Green RAG Rating achieved from NHSE/I assessment

Appendix 1: Annual Programme of Works 2018-2019

Project Update Report - Infection Prevention and Control Annual Report Update

Project Management	Janette Pritchard / IPC Team
Circulation	
Date	

Overall Status (Compliance)		**97.5%**

Project Status Overview

Exceptions	RAG	Key Notes
Criterion 1.20 Update Surgical Site Surveillance page for the intranet and develop where necessary		No updates on the intranet July 18 – March 19 due to staff sickness
Criterion 1.35 6 monthly reports for link nurse attendance		Meeting cancelled in January. Review after next meetings in April.
Criterion 6.7 Audit of job descriptions		Due to staff sickness not completed
Criterion 8.1 Review requirement for information officer		Agreed with DIPC. Due to staffing not able to undertake role at moment.
Criterion 8.2 Review available IT surveillance systems		Quote for programme received from ICNet. On risk register. On hold due to other hospital programmes not being compatible.
Audit of compliance with isolation practices (quarterly) July, Oct, Jan, April		Jan 19 – not completed
Sluice Audit		Delayed until April 19 to allow for estate to complete all outstanding items raised after NHSi visit

IPC Annual Programme 2018-19	
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.	**98%**
Criterion 2 Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections	**100%**
Criterion 3 Ensure appropriate antimicrobial use to optimise patient outcomes and to reduce the risk of adverse events and antimicrobial resistance	**100%**
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.	**100%**
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	**100%**
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. Systems to ensure that all care workers (including contractors and volunteers) are aware of and discharge	**98%**

IPC Annual Programme 2018-19	
Criterion 7 Provide or secure adequate isolation facilities	**100%**
Criterion 8 Secure adequate access to laboratory support as appropriate	**78%**
Criterion 9 Have and adhere to policies, designed for the individuals care and provider organisations, that will help to prevent and control infections	**100%**
Criterion 10 Providers have a system in place to manage the occupational health needs and obligations of staff in relation to infection	**100%**

IPC Annual Programme 2018-19	
Appendix 1 **Audits**	**96%**
Appendix 2 **Policies/Leaflets**	**100%**

Appendix 2: TWCCG Annual Programme of Works 2018-2019

Project Update Report - Infection Prevention and Control Annual Report Update	
Project Management	Janette Pritchard / IPC Team
Circulation	
Date	

Overall Status (Compliance)		100.00%
Project Status Overview		
Exceptions	RAG	Key Notes

IPC Annual Programme 2018-19	
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.	100%
Criterion 2 Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections	100%
Criterion 3 Ensure appropriate antimicrobial use to optimise patient outcomes and to reduce the risk of adverse events and antimicrobial resistance	100%

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.**	**100%**
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**	**100%**
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.** **Systems to ensure that all care workers (including contractors and volunteers) are aware of and discharge**	**100%**
Criterion 10 **Providers have a system in place to manage the occupational health needs and obligations of staff in relation to infection**	**100%**

IPC Annual Programme 2018-19	
Appendix 1: Audits **SaTH IPC Team to support TWCCG General Practitioners (GP) with compliance with IPC standards and complete one annual IPC audit per GP practice and ongoing support if indicated**	**100%**

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/