Report to:	Trust Board	**Agenda item:**	SFT4052
Date of Meeting:	7th June 2018		

Report Title:	Director of Infection Prevention & Control (DIPC) Annual Report 2017/18 (May 2018)			
Status:	**Information**	**Discussion**	**Assurance**	**Approval**
	X		**X**	
Prepared by:	Fiona McCarthy – Lead Nurse			
Executive Sponsor (presenting):	Lorna Wilkinson, Director of Nursing			
Appendices (list if applicable):	Included within the report (Pages 29 – 34)			

Recommendation:

The Board is asked to:

1. Note the report and how the contents relate to Board assurance.

2. Minute/document that the Board continues to acknowledge their collective responsibility as described above and detailed within the DIPC report.

Executive Summary:

The Trust Board recognises their collective responsibility for minimising the risks of infection and has agreed the general means by which it prevents and controls these risks. The responsibility for infection prevention and control is delegated to the Director of Infection Prevention & Control (DIPC).

The DIPC Reports together with the monthly Key Quality Performance Indicators Report are the means by which the Trust Board assures itself that prevention and control of infection risks are being managed effectively.

The purpose of the Annual DIPC Report is to inform the Trust Board of the progress made against the 2017/18 Annual Action Plan, to reduce healthcare associated infections (HCAI)

and sustain improvements in infection prevention and control practices.

The reported 12 month period has been a busy time for Infection Prevention & Control but the Trust has achieved good outcomes to date which include the following:

- No reported Trust apportioned MRSA bacteraemias
- 8 reported Trust apportioned Clostridium difficile cases against a trajectory of <19
- Recognised as one of the most improved reductions in E.coli bacteraemias nationally
- Concerted effort continues with antimicrobial stewardship and continued decreases in consumption can be seen in Section 11of this paper
- Positive Patient Led Assessment of the Care Environment (PLACE) scores (Section 15)
- A robust decontamination audit plan (Section 12)
- Positive implementation of 'point of care' (POCT) 'flu testing in the Acute Medical Unit

Key challenges

- Mandatory training compliance which, although improving slowly remains below the Trust target of 85%.
- Comprehensive work continues (along with independent advice) on the water safety agenda (Legionella and Pseudomonas). However, working with such a large and complex water system poses challenges, and positive counts have been identified during this 12 month reporting period. There are robust monitoring and mitigation activities in place.
- Maintaining a fully compliant sterilisation service until the new SSL facility is fully operational.
- There is an increasing occurrence of complex multi-resistant organisms, which the IPC team through the described assurance framework, continue to keep pace with.

Salisbury
NHS Foundation Trust

Director of Infection Prevention & Control (DIPC)

Annual Report 2017/18

Lorna Wilkinson
DIPC

May 2018 (Final v.2)

1. Introduction

The Trust Board recognises their collective responsibility for minimising the risks of infection and has agreed the general means by which it prevents and controls these risks. The responsibility for infection prevention and control is delegated to the Director of Infection Prevention & Control (DIPC).

The DIPC Reports together with the monthly Key Quality Performance Indicators (KQPI) Report are the means by which the Trust Board assures itself that prevention and control of infection risks are being managed effectively.

The purpose of the Annual DIPC Report is to inform the Trust Board of the progress made against the 2017/18 Annual Action Plan (Appendix 1), to reduce healthcare associated infections (HCAI) and sustain improvements in infection prevention and control practices.

The action plan focuses on the Trust achieving the standards identified in 'The Health and Social Care Act 2008: Code of Practice on the prevention and control of infections and related guidance' (2015), to ensure that patients are cared for in a clean and safe environment, where the risk of HCAI is kept as low as possible.

The reported 12 month period has been a busy time for Infection Prevention & Control but the Trust has achieved good outcomes to date with no reported Trust apportioned MRSA bacteraemias, and eight reported Trust apportioned Clostridium difficile cases against a trajectory of <19 for 2017/18. Concerted effort continues with antimicrobial stewardship and continued decreases in consumption can be seen in Section 11. Other achievements to note can be seen in the improved Patient Led Assessment of the Care Environment (PLACE) scores (Section 15) and the robust decontamination audit plan (Section 12).

2. Governance Arrangements

The work towards achieving the objectives of the Annual Action Plan 2017/18 is monitored via the Infection Prevention and Control Working Group (IPCWG), which reports to the Infection Prevention and Control Committee (IPCC) and onto the Clinical Governance Committee (CGC), which completes the governance arrangements (Appendix 2).

3. Infection Control Arrangements

A comprehensive infection prevention and control service is provided Trust wide. The Infection Prevention and Control Team (IPCT) provides a liaison and telephone consultation service for all inpatient and outpatient services, with additional arrangements for seven day service cover by an Infection Control Nurse (ICN) during declared Norovirus outbreaks.

The IPCT currently comprises an Infection Control Doctor (ICD)/Consultant Microbiologist, and 3.0 whole time equivalent (w.t.e) ICNs and secretary (0.6 w.t.e). In addition, there are 2 Consultant Microbiologists, one of whom is the Trust Antimicrobial Lead.

4. Assurance Activity

The IPCC monitors the action plan on behalf of the Trust Board, which is achieved through the following actions:

- Agree an annual infection control programme and monitor its implementation
- Oversee the implementation of infection control policies and procedures
- Monitor and review the incidence of HCAI
- Develop and review information regarding infection prevention and control
- Monitor the activities of the IPCT
- Benchmark the Trust's delivery of control of infection standards in various accreditation systems, and against CQC Regulations

- Monitor the implementation of infection prevention and control education
- Receive regular updates from the Antibiotic Reference Group (ARG)
- Receive regular updates from the IPCWG
- Monitor compliance and formal reporting on Legionellosis and Pseudomonas water management, via the Water Safety Group (WSG)
- Receive regular reports from the Decontamination Working Group (DWG)
- Provide regular assurance reports to the CGC

5. Budget Allocation for Infection Prevention & Control Nursing Team

The total budget for the Infection Prevention & Control nursing team is £160K comprising:

Pay

Nursing	£140K
Administrative	£18K

Non-Pay

Non- staff	£3K

Income	- £1k

Training

Training budgets are held centrally in the Trust.

6. HCAI Management and Statistics

6.1 HCAI

The investigation and management of communicable and hospital acquired infections in the Trust is the role that is most often associated with infection control and is an important and visible function of the service.

The Trust is required to report any HCAI outbreaks externally as a serious incident (SI). An outbreak is defined as the occurrence of two or more related cases of the same infection over a defined period. When a HCAI outbreak is declared, the Trust initially reports the outbreak to the relevant Clinical Commissioning Group (CCG) and other regulatory bodies, e.g. NHS Improvement, within 2 working days, and must undertake an investigation and submit a formal written report within 45 working days.

The Trust is also required to record these incidents on the strategic executive information system (STEIS) in line with the Serious Incident Framework: Supporting learning to prevent recurrence (NHS England, 2015), and the Health Protection Agency HCAI Operational Guidance & Standards (2012), Health Protection Agency now Public Health England (PHE) from 1st April 2013.

During 2017/18, the Trust has had **no** declared outbreaks of:

- Viral gastroenteritis (Norovirus)
- Clostridium difficile (C.difficile)
- Staphylococcus aureus, including Methicillin Resistant Staphylococcus aureus (MRSA)
- Methicillin Sensitive Staphylococcus aureus (MSSA)
- Carbapenemase producing enterobacteriaceae (CPE)
- Invasive Group A Streptococcus (iGAS)
- Multi-drug resistant Acinetobacter baumannii (MDRAB)
- Chickenpox (Varicella zoster)
- Extended Spectrum Beta Lactamase (ESBL) producers
- Pertussis
- Respiratory Syncytial Virus (RSV)
- Vancomycin Resistant Enterococcus (VRE)

- Tuberculosis (TB)

During quarter 4 of 2017/18, an outbreak of Influenza was retrospectively declared for the Trust. This resulted in the closure of a number of bays, with the subsequent loss of empty beds affecting 3 wards within the medical directorate (further details provided in section 6.8).

The ICNs provide clinical teams with infection control advice, support and education on a daily basis to all inpatient areas. The management of patients admitted with suspected and known alert organisms is discussed, and risk assessments undertaken. The Isolation Risk Assessment Tool (IRAT), Flowchart for the Management of Inpatients with Diarrhoea, and Diarrhoea Pathway have been developed and implemented to assist staff competency and confidence in the management of cases.

The availability of sideroom facilities across the Trust site to isolate infected patients can be limited at times when demands on capacity are high. In such instances, risk based decisions are necessary. Patients with alert organisms can be safely managed either within cohort bays, or isolation nursed in a bed space. The ICNs continue to review patients nursed in siderooms on a daily basis to prioritise high risk patients. Information and guidance is communicated to the ward nursing and medical teams and the Clinical Site Coordinators, with additional written documentation provided to support staff in the ongoing management of these patients.

Additional information regarding alert organisms can be accessed from the Public Health England (PHE) website: https://www.gov.uk/government/organisations/public-health-england

6.2 Viral gastroenteritis (Norovirus)

The Trust has experienced a fairly consistent level of activity associated with patients experiencing diarrhoea and/or vomiting. This included patients admitted with symptoms of diarrhoea and/or vomiting and isolated in a sideroom from admission, and patients who were nursed in a bay environment and developed symptoms during their admission period.

During 2017/18, the level of diarrhoea and/or vomiting activity has continued. In accordance with our policy this has resulted in the closure of two inpatient areas (Breamore and Whiteparish Wards), and 31 bays in 15 clinical areas across the medical, surgical and musculoskeletal directorates at different times. All occurrences were managed as per policy and from inpatient sampling by the Laboratory, there were 17 confirmed Norovirus cases. (Of note: during quarter 3, a positive Norovirus result was identified for a child who was seen in the Children's Outpatient Department (OPD), but not admitted to the Trust).

6.3 Clostridium difficile (C.difficile)

During quarter 3, the Trust declared 3 separate periods of increase incidence (PIIs) of C.difficile. This was for Trust apportioned cases (reportable and not reportable to Public Health England (PHE), identified for 2 patients on Whiteparish AMU nursed in the same bay (Level 4, medicine), 2 patients across Britford and Downton Wards who had been nursed in the same bay (surgery), and 2 patients nursed in different areas on Pembroke Ward (medicine). The required incident investigations were completed with the involvement of relevant personnel. Further measures were also implemented across the areas, including additional environmental cleaning by Housekeeping and extra audits and monitoring of practices, overseen by the relevant Directorate Senior Nurse (DSN).

The stool samples from the 6 Trust apportioned cases (3 reportable, 3 not reportable) were sent to the External Reference Laboratory for ribotyping. Results received by the Infection Control Doctor (ICD) were communicated to the DIPC, ICNs, and the medical and surgical directorates. For each of the PIIs, the positive stool samples were identified to be a different ribotype (005 and 026 for Whiteparish AMU, 012 and 002 for Britford and Downton Wards and 056 and 036 for Pembroke Ward). *(Of note: there was another Trust apportioned not reportable C.difficile case identified from Downton Ward during September 2017, which the ICNs requested was also ribotyped. This sample was identified as ribotype 023).*

The ICD concluded that for each of the PIIs, the cases were not linked and cross contamination could be excluded. Formal reports for the PIIs were generated and presented to the IPCWG during quarter 4 of 2017/18.

6.4 MRSA

During 2017/18, there has been no requirement to close beds or bays as a direct result of MRSA.

6.5 Carbapenemase Producing Enterobacteriaceae (CPE)

Following the increase in the number of cases of CPE infection identified at other regional hospitals, the ICNs have provided advice in relation to the safe transfer of patients to the Trust from other countries or UK hospitals with a known higher prevalence of CPE.

The Trust continues to implement the PHE toolkit published in December 2013, for the early detection, management and control of CPE across the inpatient and outpatient clinical areas. The Trust policy has been revised during quarter 2 of 2017/18, with new screening admission assessment documents created for the general inpatient ward areas and the Intensive Care Unit (ICU). No new cases of CPE have been identified for inpatients from screening undertaken.

6.6 Invasive Group A Streptococcus (iGAS)

During quarter 2 of 2017/18, there has been one case of invasive Group A streptococcal infection identified from a blood culture taken for a patient within an OPD setting. The patient was not admitted to the Trust.

During quarters 3 and 4 of 2017/18, there have been 5 unrelated cases of invasive Group A streptococcal infection identified from blood cultures. Four of these patients were extremely unwell and required a period of ongoing care on the Intensive Care Unit (ICU) within the Trust.

6.7 Multi-drug resistant Acinetobacter baumannii (MDRAB)

As previously reported, during quarter 4 of 2016/17, a patient who had transferred from another Trust to a ward within the musculoskeletal directorate was identified with a resistant Acinetobacter species from extensive transfer screening. This patient had previously been identified to have MDRAB in a number of sites and other resistant organisms whilst at the other Trust.

As the patient was a planned transfer, the ICNs were able to communicate with the clinicians involved in the patient's care, Consultant Microbiologists, ward team, and IPCT at the previous Trust, in order to safely manage this patient on transfer. The ICNs supported the ward teams in the ongoing management of this patient to ensure that strict isolation measures were maintained during their inpatient care episode.

During quarter 1 of 2017/18, a patient nursed within the musculoskeletal directorate was identified to be MDRAB positive from a wound swab. The patient was moved to a sideroom facility on the ward for strict isolation nursing, with further screening undertaken on instruction from the Consultant Microbiologist. No patient contacts were identified and the patient was discharged from hospital with follow up arranged in the OPD.

6.8 Influenza ('flu)

During 2017/18, patients have continued to be admitted to the Trust with respiratory illnesses and 'flu-like' symptoms, although the incidence markedly decreased during quarters 1 and 2.

When required, patients have been isolated within sideroom facilities on admission; some patients were managed within the bay setting. In both situations, patient contacts were identified for follow up. When a positive influenza result is confirmed, appropriate antiviral prophylaxis is provided as per PHE guidance. The IPCT provide support and guidance to staff groups within the ward teams in the ongoing management of identified patients, including the wearing of personal protective equipment (PPE).

During quarters 1 and 2 of 2017/18, a total of 5 inpatient influenza cases were identified (Influenza A and B) from in-house testing with no cases of RSV. At the beginning of quarter 3 of 2017/18, sporadic cases of RSV were identified, with all inpatients appropriately managed in sideroom facilities.

During December 2017, the number of patients presenting at the Trust with 'flu-like symptoms increased dramatically. 'Point of care testing' (POCT) for influenza (using the Cepheid Genexpert testing kit) was introduced on the Acute Medical unit (AMU) to allow rapid testing to be undertaken by trained ward staff. This testing improved the speed of diagnosis of Influenza and RSV, and also helped aid the appropriate management and placement of patients. A total of 8 inpatient RSV cases were identified (both adult and children), 8 cases of Influenza A and 24 cases of Influenza B (one of whom was also RSV positive). There was a requirement to close 2 bays as a direct result of Influenza and RSV activity within the medical directorate (Durrington Ward and Pembroke Suite).

During quarter 4, an outbreak of Influenza was retrospectively declared for the Trust on Thursday 22nd February 2018. There had been a noticeable increase in the number of patients attending and/or being admitted to the Trust with 'flu-like symptoms. This resulted in the closure of a number of bays, with the subsequent loss of empty beds. The 3 wards affected were Laverstock and Pembroke Wards (both of which closed), and Redlynch Ward, which had one 6 bedded bay closed within the medical directorate. A total of 19 inpatient RSV cases were identified (both adult and children) and other respiratory viruses, 128 cases of Influenza A and 164 cases of Influenza B. *(Of note: The Trust is unable to provide previous year figures for comparison).*

The outbreak was reported in line with the Trust Incident Reporting Policy and Process and recorded on STEIS in a timely manner. A total of four Outbreak Management Meetings (OMM) were held, plus an initial review meeting. From the information reported and evidence gathered, the Outbreak Management Group (OMG) members were able to establish that there had been no onward transmission to other ward areas and/or departments; wards affected could not be linked; AMU was not closed as patient flow was maintained and no staff absent from wards affected with 'flu-like illnesses. It is recognised that the virus appeared to spread rapidly within ward areas and whilst 'flu is a virulent virus, there are recommendations relating to this to try and mitigate further from lessons learnt.

An investigative report was commissioned (SII260) which identified a number of recommendations; however actions were taken at the time to ensure any immediate risks were significantly reduced. The length of the outbreak period was short (less than six days) due to effective control measures and the outbreak was declared over on Tuesday 27th February 2018.

6.9 Vancomycin Resistant Enterococcus (VRE)

During 2017/18, new unrelated cases of VRE have been identified within the medical, surgical and musculoskeletal directorates, with a number of patients also identified to be VRE positive either in the community, or on admission to the Trust.

When inpatient cases have been identified, required actions were agreed following discussion with a Consultant Microbiologist. These have included strict isolation precautions, the completion of additional environmental and equipment cleaning, and where indicated screening of identified patient contacts, with the continuation of antibiotic stewardship.

Patients previously VRE positive require isolation in a sideroom facility on admission wherever possible, and risk assessments undertaken to identify those patients suitable to be safely managed within bays. Although currently there is no plan to cohort VRE positive patients, this may be a consideration for the future.

6.10 Tuberculosis (TB)

During quarter 1 of 2017/18, a patient who attended the Respiratory OPD was identified to be pulmonary TB positive. The patient was not admitted to the Trust and any required follow up for close contacts was undertaken within the community setting.

7. Mandatory Surveillance

7.1 Surgical Site Infection Surveillance (SSIS)

Alert organism and alert condition surveillance data is collected and used by the Trust to detect outbreaks and monitor trends. The ICNs coordinate data collections for the national SSIS programme of various surgical procedures, which are applicable to the Trust.

Where orthopaedic surgical procedures are performed, Trusts are required to undertake mandatory SSIS every year. This must be for a minimum of a three months surveillance period or until a cohort of 50 cases has been achieved, in at least one of these categories listed below:

- Hip (prosthesis) replacement
- Knee (prosthesis) replacement
- Repair of neck of femur
- Reduction of long bone fracture

The Trust complies with this annual requirement to undertake SSIS.

- The category for hip replacement surgery was commenced on 1st April 2017, and by 30th June 2017 the required number of new patients undergoing hip replacement surgery had been achieved. However, a decision was made to extend the data collection period to the end of quarter 2 (2017/18), in order to achieve a comparable cohort.
- The final cohort for quarters 1 and 2 of 2017/8, consisted of 141 patients and identified 1 deep incisional infection, as defined by the criteria set by PHE. The data was submitted to PHE within the agreed timeframe.

Formal reports outlining progress with SSIS were presented at the IPCC meetings and disseminated to relevant Trust personnel.

The commencement and facilitation of the SSIS process is dependent on the availability of web reports from the Informatics Department (IT). Due to the data warehouse issues, there was a delay in activating this system for quarter 1 of 2017/18 and data was collated manually by the ICNs. However, this issue has now been resolved.

7.2 Methicillin Resistant Staphylococcus aureus (MRSA)

The PHE Mandatory enhanced MRSA bacteraemia surveillance scheme (updated March 2016), is used to measure the effectiveness of infection prevention and control practices in all NHS Trusts. The rationale for the surveillance is that it is sometimes difficult to distinguish between colonisation and true infection caused by MRSA, but culture of the bacterium from blood almost always represents significant infection.

The Trust has continued to report MRSA screening rates for all elective and emergency admissions to ensure continued improvement in reducing infections. These screening compliance rates are monitored by the Directorate Management Teams (DMTs) and reported as a KQPI. The ICNs undertake a monthly emergency admission MRSA screening audit, and a quarterly elective admission MRSA screening audit. Feedback is provided to DMT's about compliance rates and any identified missed screens for follow up actions and outcomes are reported to the Matrons Monitoring Group (MMG).

The Trust continues to review MRSA screening options to potentially reduce the number of screens for patients **not** admitted to identified 'high risk' areas, as per Department of Health (DH) guidance (2015). During quarter 2 of 2017/18, it was agreed by the IPCWG that compliance of screening for 'high risk' patients and areas is identified from the emergency screening data. This will form a baseline to indicate whether these patients are being screened appropriately.

The Trust reports mandatory enhanced surveillance in line with PHE requirements onto the national HCAI Data Capture System (DCS) website. The Trust adheres to the classification of cases in accordance with the set definitions. This is applicable to MRSA bacteraemia cases and C.difficile cases, and differs from previous classification reporting formats. Results are provided in the summary below, and include the definitions of 'Trust apportioned' cases and 'non-Trust apportioned' cases. The Trust's MRSA Trust apportioned cases target for 2017/18 is zero.

MRSA Bacteraemia Trust apportioned cases include patients that are –

1. Inpatients, day patients and emergency assessment patients; **AND**
2. have had a specimen taken at an acute Trust; **AND**
3. specimen is **3 or more** days after date of admission (admission date is considered day '1').

Non-Trust apportioned cases include all cases that are **NOT** apportioned to the acute Trust.

Table 1: Breakdown of total number of Trust cases recorded April 2017 to March 2018 (Figures in brackets show number of cases recorded April 2016 to March 2017)

	Quarter 1			Quarter 2			Quarter 3			Quarter 4			Total
	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	
Total patients	**0 (0)**	**0 (0)**	**0 (0)**	**0 (0)**	**0 (1)**	**0 (0)**	**0 (1)**	**0 (0)**	**0 (0)**	**0 (0)**	**0 (0)**	**0 (0)**	**0 (2)**
Non Trust apportioned cases	0 (0)	0 (0)	0 (0)	0 (0)	0 (1)	0 (0)	0 (1)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	**0 (2)**
Trust apportioned cases	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	**0 (0)**

7.3 Clostridium difficile

The control of this infection is managed by the combination of adherence to the correct infection control practices, environmental cleaning, equipment decontamination and prudent antibiotic stewardship.

7.4 Monitoring and diagnostic C.difficile testing

The Trust continues to apply DH guidance for C.difficile testing and the previously agreed revised C.difficile testing and reporting algorithm. All C.difficile positive stool samples that test toxin positive are reportable to PHE. (Of note: from April 2017, changes were made regarding the mandatory reporting requirements for Trusts. This is in relation to the classification of C.difficile cases with a focus on previous healthcare interactions/episodes. Following further clarification from PHE, the definition of Trust apportioned and non-Trust apportioned cases has not changed).

In accordance with PHE definitions, C.difficile Trust apportioned cases include patients that are –

1. Inpatients, day patients and emergency assessment patients; **AND**
2. have had a specimen taken at an acute Trust; **AND**
3. specimen is **4 or more** days after date of admission (admission date is considered day '1').

Non-Trust apportioned cases include all cases that are **NOT** apportioned to the acute Trust.

All patients with a stool sample confirming the presence of C.difficile require the implementation of strict infection control measures and practices e.g. isolation nursing in a sideroom facility, the completion of terminal and enhanced cleaning by Housekeeping and a review by the relevant clinicians to determine if C.difficile treatment is indicated. The formal reporting process to PHE is managed by the ICNs under direction of the DIPC and ICD, and has had an impact on the team's workload.

Table 2 below relates to the breakdown of all inpatient reportable cases of C.difficile and **Table 3** relates to the total reportable cases of C.difficile recorded by the Trust.

Table 2: Breakdown of reportable cases recorded for all inpatients April 2017 to March 2018 (Figures in brackets show number of inpatient reportable cases April 2016 to March 2017)

	Quarter 1			Quarter 2			Quarter 3			Quarter 4			Total
	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	
Total Inpatients	**1 (2)**	**1 (0)**	**2 (1)**	**0 (0)**	**0 (0)**	**2 (1)**	**2 (4)**	**2 (5)**	**1 (0)**	**1 (4)**	**3 (1)**	**1 (2)**	**16 (20)**
Non Trust apportioned cases	0 (0)	1 (0)	2 (0)	0 (0)	0 (0)	1 (0)	1 (1)	0 (1)	0 (0)	1 (2)	1 (1)	1 (2)	**8 (7)**
Trust apportioned cases	1 (2)	0 (0)	0 (1)	0 (0)	0 (0)	1 (1)	1 (3)	2 (4)	1 (0)	0 (2)	2 (0)	0 (0)	**8 (13)**

Table 3: Breakdown of total number of reportable C.difficile cases recorded April 2017 to March 2018 (Figures in brackets show total number of reportable cases recorded April 2016 to March 2017)

	Quarter 1			Quarter 2			Quarter 3			Quarter 4			Total
	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	
Inpatients	**1 (2)**	**1 (0)**	**2 (1)**	**0 (0)**	**0 (0)**	**2 (1)**	**2 (4)**	**2 (5)**	**1 (0)**	**1 (4)**	**3 (1)**	**1 (2)**	**16 (20)**
Community Hospitals	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (0)	**2 (0)**
General Practitioners (GPs)	1 (2)	2 (2)	2 (0)	0 (1)	1 (0)	0 (1)	0 (2)	2 (2)	0 (3)	1 (0)	0 (4)	5 (2)	**14 (19)**
Residential/Nursing Home	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	**0 (0)**
Other (e.g. Coroner, Private Hospital, Day Attender, ED, Outpatient)	0 (0)	0 (1)	1 (0)	0 (1)	0 (0)	0 (0)	1 (0)	0 (1)	0 (1)	0 (0)	1 (0)	0 (0)	**3 (4)**
Total	**2 (4)**	**3 (3)**	**5 (1)**	**0 (2)**	**1 (0)**	**2 (2)**	**3 (6)**	**4 (8)**	**1 (4)**	**2 (4)**	**4 (5)**	**8 (4)**	**35 (43)**

(Of note: In a single patient, a positive test occurring after a previous positive test is considered a new episode after 28 days).

For 2017/18, the Trust has reported 8 Trust apportioned C.difficile cases, which does not exceed the target set for the Trust by NHS England of <19 for the full year. For each inpatient episode, an infection control incident investigation is completed using a 'SWARM' approach. This process has been led by the ICNs, with the increased involvement of nursing and medical staff in the relevant

clinical areas and the Antimicrobial Pharmacist (or area Pharmacist), to complete the required documentation.

This aids ownership and identification of any learning that needs to be implemented by staff. The ICNs continue to provide additional support to facilitate this process. However, the directorate remain responsible for agreeing any resultant action plan and submitting progress with completion to the IPCWG members. Actions taken include continued patient education and completion of High Impact Intervention (HII) auditing, to ensure the safe management of these patients. Action is taken when non-compliance with Trust policy is identified.

From quarter 4 of 2017/18, monthly 'Share & Learn' SWARM meetings have been held to facilitate shared learning, identify key themes and agree actions to contribute to the reduction the key areas of falls (with major harm), hospital acquired pressure ulcers and Trust apportioned C.difficile cases. The group also advise the Clinical Risk Group (CRG) of any key concerns that are unresolvable at ward level and require escalation.

Multidisciplinary C.difficile ward rounds have continued by the ICD and/or Consultant Microbiologist and ICNs, with the involvement of the Antimicrobial Pharmacist when required. Attendees can include the DIPC, Deputy DIPC and Medical Director. These rounds provide an opportunity to formally review and assess the patient's progress and management in relation to C.difficile. The group members also ensure that information is shared with the ward teams and this is supported by an entry within the patient healthcare records. The membership of this group has been reviewed, and a Gastroenterologist and Dietician will be involved as required.

During 2017/18, no Trust apportioned reportable cases have been submitted to the 'Appeals Panel Process' for the relevant CCG.

7.5 Methicillin Sensitive Staphylococcus aureus (MSSA)

The Trust continues to report MSSA bacteraemia cases via the HCAI DCS website. Currently, there is no national guidance for data definition of MSSA bacteraemia cases for targets to be set. Therefore, the Trust has applied the definition criteria used for MRSA bacteraemia cases to the MSSA bacteraemia cases recorded within the Trust. This allows the cases to be classified as either Trust apportioned or non-Trust apportioned.

Table 4: MSSA bacteraemias figures recorded for blood cultures from inpatients and Emergency Department April 2017 to March 2018
(Figures in brackets show number of cases recorded April 2016 to March 2017)

	Quarter 1			Quarter 2			Quarter 3			Quarter 4			Total
	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	
Total patients	**2 (5)**	**2* (4)**	**1 (6)**	**6 (5)**	**1 (4)**	**1 (0)**	**2 (4)**	**3 (4**)**	**1* (1)**	**5 (2)**	**5 (5)**	**2* (2)**	**31* (42**)**
Non Trust apportioned cases	2 (5)	2 (3)	0 (2)	4 (4)	0 (4)	1 (0)	1 (4)	1 (2)	1 (0)	5 (2)	2 (4)	1 (2)	**20 (18)**
Trust apportioned cases	0 (0)	0 (1)	1 (4)	2 (1)	1 (0)	0 (0)	1 (0)	2 (2)	0 (1)	0 (0)	3 (1)	1 (0)	**11 (6)**

**November 2016 – 1 additional MSSA bacteraemia case noted: identified from blood cultures taken whilst attending Salisbury Dialysis Unit. The patient was not admitted to the Trust.
*May 2017 – 2 additional MSSA bacteraemia cases noted: one identified from blood cultures whilst the patient was attending Salisbury Dialysis Unit and later admitted to the Trust via the Emergency Department (ED): one identified from blood cultures taken whilst the patient was attending an outpatient clinic, and later admitted to the Trust from the clinic.

*December 2017 – 1 additional MSSA bacteraemia case noted: identified from blood cultures taken whilst attending Salisbury Dialysis Unit, and discharged. The patient was seen again in ED, but not admitted to the Trust.
*March 2018 – 1 additional MSSA bacteraemia case noted: identified from blood cultures taken whilst attending Salisbury Dialysis Unit. The patient was later admitted to the Trust.

During 2017/18, there have been 11 Trust apportioned cases identified. The ICNs undertake an infection control incident investigation for all Trust apportioned inpatient cases, in conjunction with relevant staff from the clinical area concerned. Emphasis has been placed on the need for continued monitoring of all invasive devices by staff, adherence to the relevant Trust policies relating to the taking of blood cultures and skin disinfection/decontamination and maintaining the required care documentation.

7.6 Gram-negative bloodstream infections (GNBSIs)

7.6.1 Escherichia coli (E.coli)

The Trust continues to input enhanced surveillance data for E.coli bloodstream infections (BSI) in accordance with current guidance from the DH and PHE. From 1st April 2012, the Trust has applied the definition criteria used for MRSA bacteraemia cases to the E.coli bacteraemia cases recorded within the Trust. This allows the cases to be classified as either Trust apportioned or non-Trust apportioned.

Table 5: E.coli Bacteraemias figures recorded for blood cultures from inpatients and Emergency Department April 2017 to March 2018
(Figures in brackets show total number of cases recorded from April 2016 to March 2017)

	Quarter 1			Quarter 2			Quarter 3			Quarter 4			Total
	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	
Total patients	**9 (11)**	**9 (6)**	**10 (8)**	**8 (13)**	**9 (8)**	**9 (12)**	**9 (14)**	**12 (14)**	**8 (11)**	**7 (6)**	**10 (12)**	**9 (7)**	**109 (122)**
Non Trust apportioned cases	7 (10)	6 (5)	10 (5)	7 (9)	8 (7)	8 (12)	8 (8)	9 (9)	7 (8)	7 (5)	5 (10)	8 (6)	**90 (94)**
Trust apportioned cases	2 (1)	3 (1)	0 (3)	1 (4)	1 (1)	1 (0)	1 (6)	3 (5)	1 (3)	0 (1)	5 (2)	1 (1)	**19 (28)**

Following the identification of a positive blood culture result for E.coli, a Consultant Microbiologist completes a PHE mandatory enhanced surveillance form. In consultation with the relevant clinician, key patient factors are considered in order to establish if the case is likely to be healthcare related. However, it may not be possible to determine.

Of the 19 Trust apportioned cases identified during 2017/18, 8 were unknown or unclear source of infection and the remaining 11 cases had a source of infection identified. Of these unrelated 11 cases, the sources of infection were:

- Hepatobiliary, related to a surgical intervention (2 cases)
- Urinary tract, including lower urinary tract (6 cases)
- Gastrointestinal, related to a surgical intervention/intra-abdominal (3 cases).

The Trust recognises the importance of continuing improvement work with the appropriate recognition and treatment of infections and adherence with NICE guidelines. This data was entered onto the HCAI DCS website. Where concern is highlighted by the Microbiologist for an individual case, further investigation is undertaken. For these Trust apportioned cases, no further follow up was identified.

The Trust will continue to work towards reducing the incidence of these GNBSIs. The ICNs are working collaboratively with the relevant CCGs who are leading on achieving the Quality Premium (from April 2017, for 2 years), aiming to reduce all E.coli BSIs by 10% in year 1.

During March 2018, the DIPC received an acknowledgement letter from NHS Improvement regarding the Trust's excellent contribution in reducing E.coli BSIs, based on the Quality premium 2017/18. Using the 2016 data as the baseline, the Trust achieved a 43.3% reduction in cases for 2017.

7.6.2 Klebsiella sp. and Pseudomonas aeruginosa

From April 2017, the incidence of GNBSIs for Klebsiella sp. and Pseudomonas aeruginosa reported at the Trust now requires enhanced investigation and data entry onto the PHE DCS website. This work has been undertaken by the IPCT.

Table 6: Klebsiella sp. Bacteraemias figures recorded for blood cultures from inpatients and Emergency Department April 2017 to March 2018

	Quarter 1			Quarter 2			Quarter 3			Quarter 4			Total
	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	
Total Inpatients	**0**	**0**	**2**	**2**	**0**	**1**	**2**	**2**	**4**	**3**	**6**	**1**	**23**
Non Trust apportioned cases	0	0	2	2	0	1	2	2	4	3	3	1	**20**
Trust apportioned cases	0	0	0	0	0	0	0	0	0	0	3	0	**3**

Table 7: Pseudomonas aeruginosa Bacteraemias figures recorded for blood cultures from inpatients and Emergency Department April 2017 to March 2018

	Quarter 1			Quarter 2			Quarter 3			Quarter 4			Total
	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	
Total Inpatients	**0**	**3**	**0**	**1**	**1**	**0**	**1**	**3**	**4**	**1**	**0**	**1**	**15**
Non Trust apportioned cases	0	2	0	1	1	0	1	1	4	0	0	0	**10**
Trust apportioned cases	0	1	0	0	0	0	0	2	0	1	0	1	**5**

7.7 Infection in Critical Care Quality Improvement Programme (ICCQIP)

From April 2017, the Trust has participated in the surveillance of BSIs in patients attending the ICU and Neonatal Unit (NNU). Data collection and submission is coordinated by the Lead ICU Nurse, with the support of the ICNs and involvement of the NNU staff. From the data submitted, no further updates have been provided by PHE.

7.8 Private Healthcare Information Network (PHIN)

The Trust is now mandated to report externally regarding private patients via PHIN. In relation to infection prevention and control, this involves the ICNs undertaking monthly cross checking of a

dedicated SharePoint database of private patients. If it is identified that a patient has a HCAI that is externally reportable (as per national mandatory reporting definitions), then this is added to the SharePoint database for the relevant patient, for submission to PHIN by the Trust.

8. Hand Hygiene

All inpatient and outpatient clinical areas are required to undertake monthly hand hygiene audits. Compliance rates are calculated, and individual tables are produced for each area within the directorates. These are provided to clinical leaders, DMTs and DIPC via the monthly MMG meetings.

To promote hand hygiene best practice, a Uniform Policy and Workwear Guidance including 'Bare Below the Elbow' (BBE) policy remains in place. Compliance with the policy and audit results is monitored by the DMTs and feedback provided to the DIPC.

The Trust target for hand hygiene compliance rates is >85%, with formal reporting by the directorates of measures implemented to improve non- compliance. This target is reflected in the clinical leaders and DSNs personal objectives, with ongoing work required by the DMTs to sustain improvements. To promote hand hygiene compliance the ICNs continue to train and update the Infection Control Link Professionals (ICLPs) to undertake hand hygiene assessments for staff in their own areas. This has proved successful in raising the profile of hand hygiene behaviour and compliance with BBE. It also provides an alternative opportunity for staff to complete their annual mandatory hand hygiene assessment. The directorates are encouraged to share successes within individual areas at the MMG meetings.

Analysis of the hand hygiene audit data demonstrates that the key factors influencing the compliance scores are:

- Non completion of audits by areas
- Non-compliance with hand decontamination by other staff groups, lowering the overall score for the area concerned
- Audit delegated to a staff member(s) unfamiliar with the audit process

When compliance is poor the ICNs support individual clinical areas and staff groups promoting patient safety and hand decontamination. The audit results continue to be disseminated according to staff groups for each area. This action has provided evidence to strengthen the feedback process for the directorates to take the necessary action.

The ICNs have continued to facilitate the completion of hand hygiene audits by an external auditor, the Healthcare Manager for GOJO Industries, across selected clinical areas. The external auditor utilised the World Health Organisation (WHO) hand hygiene audit tool, and assessed the hand hygiene practices of all staff groups against the '5 moments for hand hygiene':

- Moment 1: Before patient contact
- Moment 2: Before a clean/aseptic procedure
- Moment 3: After body fluid exposure risk
- Moment 4: After patient contact
- Moment 5: After contact with patient surroundings

For 2017/18, the overall compliance rate from 19 external audits completed across 13 clinical areas at different times was 78.82%, with several areas being audited more than once during the year. This is comparable to 2016/17, where the overall compliance rate was 78.25%, from 16 external audits across 13 clinical areas (several areas audited more than once).

Detailed analysis was undertaken to identify the key areas of non-compliance, which was predominantly staff missing moment number 5, handwashing after contact with patient surroundings. The results were reported via the DIPC and the IPCC and feedback was provided to

the clinical leaders and DMTs to address the shortfall in practice. Additional education and support has been provided by the ICNs to staff groups focusing on the audit findings.

The 'Red, Amber and Green' rating for the hand hygiene compliance audits continues and includes actions to be identified for areas that do not achieve the 'pass threshold' of 85% or show improvements. This RAG rating was further revised and the impact of these measures is being monitored by the IPCWG, DMTs and MMG.

9. Audit

In line with the requirements of the Health and Social Care Act 2008, a programme of infection prevention and control audits is illustrated in the annual audit programme (Appendix 3). The programme ensures that audit is clinically focused and targeted at improving infection prevention and control practices for all disciplines across the Trust.

The ICNs have been involved with the following audit work during 2017/18, including the follow up and outcomes from auditing against infection control policies. Final reports are generated for each completed audit, with resulting action plans approved by the IPCWG before submission to the IPCC and Clinical Management Board (CMB):

- Dirty Utility Room Standard – A breakdown of results for each of the clinical areas identified key themes relating to decontamination processes, signage and equipment and storage of items in the rooms.
- BBE & Uniform Policies and Workwear guidance –
    - A total of 476 staff members wearing a uniform were audited, with a compliance rate of 99.37% for no sleeve or garment being worn below the elbow, and a compliance rate of 98.11% for no wristwatch or wrist jewellery being worn.
    - Separate observations were also undertaken of clinical staff not routinely wearing a uniform, to assess compliance with the Trust BBE policy. For the 162 staff audited, this showed a compliance rate of 99.38% for no sleeve or garment being worn below the elbow, and a compliance rate of 98.15% for no wristwatch or wrist jewellery being worn.
    - Overall, compliance fell across 8 of the audit criteria. The key areas of non-compliance related to the wearing of jewellery, the style of footwear, hairstyles, and the wearing of a Trust identification badge.
    - A detailed breakdown of results for each of the directorates was provided within the audit report.
- Use of the MRSA Monitoring, Prescription and Treatment Pathway (MRSA Pathway) and Isolation Risk Assessment Tool (IRAT) –
    - MRSA Pathway commenced for 20 of the 21 patients identified as MRSA positive, providing a compliance rate of 95.24%. This compares to the previous audit where the compliance rate was 94.59% (35 of the 37 MRSA positive patients).
    - IRAT completed for 227 of the 300 patients audited, providing a compliance rate of 75.67%. Compared to the previous audit this is a slight decrease where the compliance rate was 81.59% (164 of the 201 patients audited).
    - This audit report is awaiting submission to CMB.
- 2% Chlorhexidine Gluconate (CHG) in 70% Alcohol Isopropyl Wipes - Findings confirmed that use of the wipes is appropriately established in clinical practice, for skin preparation prior to the insertion of peripheral cannula, prior to the taking of blood cultures, and for cleansing hubs/ports prior to the administration of either intravenous fluids or intravenous medicines (it was also confirmed that where the wipes are not used, an alternative product and/or appropriate procedure was in place). The audit identified an action relating to use of the Visual Inspection Phlebitis (VIP) score, for implementation by the clinical areas with feedback and monitoring via the directorates. (This report is awaiting submission to CMB).

The ICNs continue to undertake additional observational audits of staff practices within clinical areas. Feedback is provided at the time of the audit to the nurse in charge, and where non-compliance has been identified this is addressed with the individual staff member. Feedback is

provided to the relevant Clinical Leader. Practice observations have included application of standard precautions, isolation nursing precautions, commode cleanliness, dirty utility room standards and linen management.

The ICNs supported the trial of the 'Perfect Ward' application auditing tool in designated clinical areas from the end of quarter 2 (2017/18). This involved undertaking a dedicated infection prevention and control inspection, providing instant access to findings for action by the Clinical Leader where necessary. There was representation from the ICNs during the evaluation period, in preparation for the introduction of the system across 20 clinical areas in 2018/19.

10. Innovations

The IPCWG continue to lead the review of technologies and innovations related to the reduction of HCAIs, with the involvement of key personnel across the Trust site. This has been incorporated as a standing agenda item at the IPCWG meetings, with innovations measured against the best practice evidence/research available, which has included DH recommendations.

The IPCWG continue to strive to ensure that the Trust implements only those technologies and innovations that have been peer reviewed and appropriately approved. For the winter season (quarters 3 and 4 of 2017/18), the Trust agreed for Influenza and RSV testing to be performed as a 'point of care' test on the new Acute Medical Unit (AMU) relocated to the new Level 2 template. This work was overseen by Microbiology and AMU staff were appropriately trained to use this kit and undertake testing. The Trust also implemented polymerase chain reaction (PCR) Norovirus testing within the Laboratory, leading to improved sensitivity and specificity.

11. Antibiotic Prescribing *(information for this section has been provided by Louise Williams, Principal Pharmacist Antibiotics)*

The ARG meets monthly to maintain oversight of the issues relating to antimicrobial use in the Trust. The group advise and promote good practice, review audit results and ensure up to date evidence based guidelines.

11.1 Guideline development/review

The ARG continually works to ensure policies on ICID (the Trust guidelines database), are easily accessible and up to date.

Guidelines recently reviewed:

- Ear, Nose & Throat (ENT)
- Oral and Maxillofacial
- Antifungal guidelines
- Respiratory infection – chronic obstructive pulmonary disease (COPD)
- Respiratory – community acquired pneumonia (CAP)
- Respiratory infection – hospital acquired pneumonia (HAP)

Guidelines currently under review:

- Penicillin Allergy Prescription Sticker Awareness Policy
- The prevention of infection in Asplenic and Dysfunctional Spleen Patients
- Gentamicin conventional multiple dosing (adults)
- Gentamicin: high dose 5mg/kg daily (adults)

Future guidelines for review:

- Endocarditis – Prophylaxis Against Infective Endocarditis
- Ophthalmology guidelines for Keratitis (adults)
- Plastic Surgery Antimicrobial Prophylaxis and Treatment
- Burns Antimicrobial Prescribing Guidelines

11.2 Audit

Regular Antimicrobial Stewardship Audits

The Lead Antimicrobial Pharmacist and a Consultant Microbiologist carry out fortnightly antimicrobial stewardship audits on the wards, auditing wards in turn on a rolling programme. Interventions are made as necessary during the audits as well as staff education. We are focusing on whether the antibiotic has been reviewed within 72 hours and the outcome of the review.

The audit reviews:

- Whether the indication is recorded on the drug chart and in the healthcare records (HCRs)
- Whether a stop/review date has been recorded on the drug chart or in the HCRs
- Whether the treatment is in line with local policy/as per microbiology and, if not, there is clear documentation why
- If there is evidence of review within 72 hours and, if so, the outcome of the review

The audit information is then entered into a basic spreadsheet which gives each patient audited a score. Missing information is coloured red to highlight areas for improvement. The ward is also given an overall percentage score. The results of the audit and a copy of the spreadsheet with areas for improvement are then e-mailed to the Consultants with patients included in the audit, the lead nurse for that ward, the senior nurse for the directorate, the Director of Nursing and the ward pharmacist.

C.difficile – Antibiotic treatment review & ward rounds

All cases of C.difficile are reviewed by a member of the Pharmacy Team, to ascertain whether past or current antibiotic treatment may have been a contributory factor. Other medications which may impact upon the patients clinical conditions are also noted and reviewed i.e. use of laxatives, antimotility drugs, proton pump inhibitors (PPIs).

A designated Senior Pharmacist attends the multidisciplinary ward rounds, as required. This is undertaken by a Consultant Microbiologist together with the ICNs. It provides an opportunity to review the treatment and management of inpatient C.difficile cases, and is also a forum to discuss any management issues or concerns. In addition, the group will liaise with the appropriate clinicians/nursing staff for the patient if required, and an entry is made within the healthcare records.

Antibiotic Awareness Week

World Antibiotic Awareness Day took place on Saturday 18th November 2017 and we raised awareness on Thursday 16th and Friday 17th November. As part of this the Lead Pharmacist for Antimicrobials and the pre-registration Pharmacist visited each ward with a trolley packed full of leaflets and information. We also had a ‘Guess how many pills in the jar’ competition which was very successful with nearly 100 people entering. We purposefully filled the jar with 1928 pills to represent the year that Alexander Fleming discovered penicillin. The number of pills was sent out as a broadcast with a useful message about the significance of antibiotic resistance. As part of the campaign this year we also signed up a further 41 people as antibiotic guardians.

11.3 Risk Management

The Pharmacy Team are encouraged to complete incident reports (DATIX) and we have introduced ‘Intervention of the month’ to encourage reporting within the department. This includes reporting any recurring or worrying trends seen with antibiotics. These DATIXs are reviewed monthly at the ARG.

11.4 Defined daily doses (DDD)

As recommended in the DH document ‘C.difficile – How to deal with the problem’ (2008, section 3 updated June 2013), a mechanism for capturing DDD data is in place. This is necessary to ensure cost effective use of antimicrobials and it also allows the Trust to monitor drug usage and compare it to that of other Trusts.

The following drug usage reports are provided to the ARG every six months:

- Cephalosporins, Ciprofloxacin, Clindamycin and Co-amoxiclav
- Ceftazidime, Cefalexin and Cefaclor
- Daptomycin, Vancomycin, Teicoplanin and Linezolid
- Imipenem, Meropenem, Ertapenem and Tazocin
- Clindamycin, Clarithromycin and Doxycycline

11.5 National Antimicrobial Commissioning for Quality & Innovation (CQUIN) 2017/19
We are now moving into the second year of the national CQUIN around Antimicrobial Resistance and Sepsis. For 2017/18 there were two parts to the CQUIN:

CQUIN 2c – Antibiotic review
Local audit of 30 patients per quarter, to ascertain if a documented antibiotic review has taken place between 24 and 72 hours in patients with sepsis who are still inpatients at 72 hours.
Milestones for the CQUIN were as follows:

- Quarter 1 – 25%
- Quarter 2 – 50%
- Quarter 3 – 75%
- Quarter 4 – 90%

We have met all targets for 2017/18 achieving a review of 94% of patients in quarter 4 of 2017/18, which is an excellent achievement.

CQUIN 2d – Reduction in antibiotic consumption (as DDDs) per 1000 admission (3 parts)

1. Reduction of total antibiotic consumption (DDDs per 1000 admissions)
2. Reduction in total consumption of carbapenems (DDDs per 1000 admissions)
3. Reduction in total consumption of piperacillin/tazobactam (DDDs per 1000 admissions)

Table 8 below shows the Trust's estimated percentage reduction/increase in antibiotic use from 2017/18 compared to 2016. We submit our raw data to PHE and the conversion into DDDs per 1000 admissions is then done by PHE themselves, so some variation in data is expected.

	Target reduction	% difference
All antibiotics	-2%	+5.0%
Piperacillin/Tazobactam	-2%	-50.4%
Carbapenems	-1%	-12.5%

(Table 8)

Results show we have easily met our target reductions for piperacillin/tazobactam and Carbapenems, which is a great achievement. However, we are unlikely to have met our reduction in all antibiotics target. This is partly due to replacing the use of broad-spectrum antibiotics (e.g. piperacillin/tazobactam and the carbapenems), with two or three different antibiotics in order to provide appropriate cover. For 2018/19 the Antimicrobial CQUIN has been changed:

For **CQUIN 2c – Antibiotic review**
Local audit of 30 patients per quarter to ascertain if a documented antibiotic review has taken place between 24 and 72 hours in patients with sepsis and who are still inpatients at 72 hours.
Milestones for the CQUIN are as follows:

- Quarter 1 – 25%
- Quarter 2 – 50%
- Quarter 3 – 75%
- Quarter 4 – 90%

However, the indicator has changed and further information is needed for the antibiotic review, based on 3 criteria:

1. The prescription must be reviewed by an appropriate clinician including:

- an Infection (Infectious Diseases (ID)/Clinical Microbiologist) senior doctor (ST3 or above) or,
- an Infection Pharmacist or,
- a senior member of clinical team (ST3 or above)

2. Documented outcome of review recorded as one of the following seven options:
   - Stop
   - IV to oral switch with a documented review date or duration of the oral antibiotic
   - OPAT (Outpatient Parenteral Antibiotic Therapy)
   - Continue with new review date or duration
   - Change antibiotic with escalation to broader spectrum antibiotic with a documented review date or duration
   - Change antibiotic with de-escalation to a narrower spectrum antibiotic with a documented review date or duration
   - Change antibiotic e.g. to narrower/broader spectrum based on blood culture results with a documented review date or duration

3. Where appropriate an IV to oral switch decision was made. If the decision was for the patient to remain on IV antibiotics, a documented rationale for not switching is clearly documented:
   - Patient is nil by mouth or not absorbing
   - No oral antibiotic option available
   - Patient not clinically improving
   - Deep seated infection
   - Based on Microbiologist/ID Consultant/Infection Pharmacist advice

All 3 criteria must be met in order to achieve a pass and therefore significant education is needed if we are to meet part 2c of the CQUIN.

The second part has also been amended for 2018/19 with the indicator for reducing the use of piperacillin-tazobactam per 1000 admissions being replaced with an indicator for the Access group of the AWaRe category.

CQUIN 2d – Reduction in antibiotic consumption (as DDDs) per 1000 admissions and proportion of broad spectrum antibiotic use

1. Reduction in total antibiotic consumption (DDDs per 1000 admissions)
2. Reduction in total consumption of carbapenems (DDDs per 1000 admissions)
3. Increase in the proportion of antibiotic usage for antibiotics within the Access group of the AWaRe category.

As we are unlikely to have met our target for total antibiotic consumption, our target for 2018/19 is a 2% reduction of total antibiotic usage against our 2017/18 target. Although the wording is slightly ambiguous, our target for carbapenems appears to be a further 2% reduction on our 2017/18 target, or to not increase our usage any higher as we have already achieved this reduction.

For part 3, the Access group must make up ≥55% of total antibiotic consumption (as DDDs per 1000 admissions) or the usage must increase by 3% from baseline 2016 calendar year. We are currently reviewing all our antibiotic guidelines to ensure the majority of appropriate guidelines contain drugs within the Access group.

The Access group includes the following antibiotics – Phenoxymethylpenicillin, Nitrofurantoin, Metronidazole, Gentamicin, Flucloxacillin, Doxycycline, Co-trimoxazole, Amoxicillin, Ampicillin, Benzylpenicillin, Benzathine Benzylpenicillin, Procaine Benzylpenicillin, Oral Fosfomycin, Fusidic Acid (sodium fusidate), Pivmecillinam, Tetracycline and Trimethoprim.

12. Decontamination *(information for this section has been provided by Sarah Jennings, Medical Device Safety Officer (MDSO) and Decontamination Lead (DL) and Fiona McCarthy, Interim Decontamination Lead from 4th December 2017*

Progress against Decontamination Strategy

The Decontamination Strategy has been updated with regard to 2016 Health Technical Memorandum (HTM) guidance and a review of decontamination in terms of Essential Quality Requirements (EQR) and Best Practice (BP) is ongoing. Key objectives are reviewed at the DWG meetings. Risk assessments are monitored and updated when necessary. Decontamination was reviewed through a Trust TIAA audit and was graded as providing "reasonable assurance". A work plan is in place to meet the recommendations established from the audit.

12.1 Activity to promote compliance with decontamination arrangements

- The Decontamination Policy is current and has been rewritten to reflect the joint venture, Salisbury Sterile Services (SSL), and new HTM regulations.
- Local decontamination audits and standard operating procedures (SOP) development continues.
- Tray tracking for instrumentation is in place and software for endoscope traceability is being developed for potential implementation.
- Wraps have changed from linen to paper although there are still a number of holes being reported. Audits have been undertaken to review practice through from SSL to receipt/storage and use in the Main Theatres Department (MTD) to identify if there are any trends in damaged wraps.
- Instrument inventory review continues with tray rationalisation in orthopaedic theatres. To support and progress this work, a Surgical Instrument Coordinator, will commence in post during quarter 1 of 2018/19.
- SSL are laser marking individual instruments for tracking purposes.
- SSL continue to process flexible endoscopes as per HTM 01-06. During 2017/18, the 5 endoscope washer disinfectors (EWDs) have all been out of use at one point due to failures and high total viable count (TVC) levels. This is largely due to the age of the machines and the constant use of them; more so when one or more is out of use. Contingency plans and actions to maintain the service are being discussed until the new SSL facility is operational.

12.2 Decontamination Audit plan

- Audits have been performed in 25 areas during 2017/18 and have included: Gynaecology OPD, Neonatal Unit (NNU), Breast Clinic, Dermatology Unit, Endoscopy Suite, Fertility Clinic, Laser Clinic, Obstetric Theatres, Pembroke Unit (Oncology Ward & Suite), MTD, Day Surgery Unit (DSU), Burns Unit, Cardiac Suite, ED, ENT OPD, Radnor Ward (ICU), Maternity Unit, Medical Devices Management Services (MDMS), Ophthalmology Clinic, Radiology Department, Respiratory Department, Sarum Ward, Spinal Unit, Urology OPD and SSL. Some areas have provided good assurance for compliance and other areas have been asked to provide additional evidence for their local decontamination processes.
- SOPs are also in use or in progress for a number of other areas performing local decontamination of devices including Spinal pressure clinic, Dermatology Unit, ENT Department and Vascular OPD.
- Work continues to standardise the post procedure endoscope clean. This has been accepted as an SOP by the Endoscopy Suite with MTD, DSU and ENT adopting this process.
- Standards for the decontamination of semi-invasive ultrasound probes used intra cavity or on broken skin have been followed up with Vascular and Radiology Departments. With the support of the DL, the Radiology Department will be using an automated decontamination process for probes using Trophon Units (Trust owned). The Lead for Radiology Ultrasound has secured an ongoing revenue budget for consumables.

12.3 Maintaining a fully compliant sterilisation facility (SSL)

The DL continues to attend a monthly SSL Operational Management Board (OMB) and also meets weekly with SSL to discuss any issues arising. During quarters 1 and 2 of 2017/18, the DL made a

case for provision for a STERRAD low temperature sterilisation facility and for SSL to also purchase and manage dry storage cabinets (DSC) once in their new facility. Implementation of HTM guidance for endoscope process challenge checks and residual protein testing of instrumentation continue to be managed between SSL and Estates Technical Services (ETS).

12.4 The Decontamination Working Group

The DWG continue to meet quarterly and during 2017/18, the Terms of Reference including membership were reviewed in light of recommendations from the TIAA audit. The DWG reports up to the IPCC.

13. Education and Training Activities

It is widely recognised that ongoing education in infection control is required in order to improve healthcare worker compliance with infection prevention and control practices. The ICNs undertake a number of induction and educational updates to a wide range of key staff within the Trust. The ICNs keep attendance data from these sessions and supports the Trust in its delivery of mandatory education for all staff. The infection prevention and control (IPC) computer based learning (CBL) package is accessible for all staff on the management learning environment (MLE) via the Trust intranet site.

During 2017/18, the ICNs continued to work with the Education Department to review the compliance data generated from the MLE system for both hand hygiene assessments (HHA) and IPC CBL modules. Further cleansing of the data was stipulated by the DIPC and this was progressed with the Education Department. **Table 9** below identifies MLE compliance data:

Year	% completion for Hand Hygiene Assessment (HHA)	% completion for IPC CBL package (MLE)
2017/18	80%	86%
2016/17	70%	81%

(Table 9)

The ICNs have continued to focus on the promotion of opportunities for staff to complete their hand hygiene assessment. This has included arranging extra sessions within specific work areas and enabling identified staff to be trained to undertake hand hygiene assessments. Furthermore, the clinical directorates facilitated the completion of hand hygiene assessments for staff by utilising a ultra-violet (UV) light box for rotation through their directorate areas and departments.

The ICNs have contributed to formal and informal teaching sessions within clinical areas and other Trust departments. These include core induction sessions in addition to specific topic requests. The facilitation of learning has also involved members of staff shadowing of the ICNs in addition to the monthly scheduled ICLP meetings. Details of education opportunities provided are available from the ICNs.

14. Water Safety Management *(information for this section has been provided by Terry Cropp, Responsible Person (RP) for Water and Head of Estates)*

This section summarises the water safety management precautions that the Trust has taken over 2017/18. This includes monitoring and remedial action that has been taken in respect of the management of the water systems.

The Trust manages the safety of water systems in line with the HTM 04-01 (Pt B) Safe Water in Healthcare Premises and HTM 04-01 (Pt C) Pseudomonas (guidance for augmented care units), together with the technical guidance document HSG274 part 2.

The Trust WSG has been active during 2017/18 in response to the management of events involving the water systems on site. The WSG is formed of technical and non-technical staff that can recommend, change and enforce issues relating to water safety across the Trust. The WSG includes representatives from all of the high risk areas identified in the policy and the Trust's independent advisors – Mr Daniel Pitcher, Authorising Engineer (AE) of the Water Hygiene Centre for quarters 1 and 2 of 2017/18 and then Mr Paul Limbrick for quarters 3 and 4 of 2017/18.

To assist the management process in respect of the water systems across the site, regular meetings of teams Responsible and Deputy Responsible Person (for Water Systems) from ETS and FES Limited (PFI maintenance contractor) are held on a monthly basis, to review progress with planned preventative maintenance (PPM) and actions in respect of water safety.

The Trust continues to keep the domestic hot water temperature elevated above 65°C as a precaution in the challenge of Legionella control. The water systems within hospitals are complex; therefore the testing and controls we have in place are designed to mitigate the risks to our patients and staff.

14.1 Annual routine water sampling results (Legionella)

Emergency review meetings have taken place in the Trust as a result of elevated sample results, the actions and results of the ongoing checks have been circulated to senior members of the Trust in a series of emails as events occur, and as regular reports to the WSG and IPCC. Local actions taken have included the cleaning and disinfection of outlets, with temperature checks and increased flushing where necessary.

Following the completed 2016/17 round of sampling, continued follow up was required in areas (as per **Table 10** below) on the basis of counts identified through this surveillance programme.

	Ward/Department	Location	DATIX
1	Emergency Department (ED)	Level 3 Sector 1	97579 + 98071
2	Nunton Unit	Level 2 Sector 1	97776
3	Durrington Ward	Level 2 Sector 2	98069
4	Post Natal Ward	Block 67	1015956
5	Fertility	Block 05	23068

(Table 10)

During quarters 1 and 2 of 2017/18, all of the areas listed have continued monitoring and mitigation in place as per policy.

- **Post Natal Ward** (Block 67) the affected outlets were decontaminated and taken out of use immediately. Subsequently a decision has been made by key members of the WSG to remove a sink in the main ward area, and a shower in room 67.18 due to lack of use or inappropriate use of these outlets, this should reduce the risk of future counts in this area.
- **Durrington Ward** major changes to the pipe work for the hot and cold water systems on Durrington Ward were completed as part of the work (2017 Site Re-configuration) on the Level 2 Sector 2 template, for the new Acute Medical Admissions (AMU) facility. The wards now have separate systems to improve circulation and temperature. These systems were commissioned and chlorinated as part of these works.
- Re-sampling following localised action and in line with policy is being completed (x 3 pre & post) in the **ED, Nunton** and **Fertility**.

The 2017/18 annual round of routine sampling for Legionella commenced on the 3rd October 2017. Elevated counts identified as a result are currently being managed in line with Trust Policy and identified action plan (agreed 7th March 2018) in the following areas:

- **Respiratory Department** (Level 3 Sector 16) – check area for dead legs, remove outlets in 3:16:30 and cut back all associated pipework. Continue to flush outlets prior to removal.
- **Cardiac Cath Laboratory** (Level 4 Sector 0) – check circulation/temperatures in the area, flush and re-sample.

- **Nunton Unit**
- **Durrington Ward** (Level 2 Sector 2) – review drawing of the system (post AMU works), flush and re-sample.
- **Post Natal Ward** (Block 67) – check temperatures of cold supply, flush and re-sample.

As of 28th March 2018, re-samples have been taken, elevated counts are still present in Post Natal and Durrington Wards, and Cardiac Cath Laboratory. Further works (temperature and circulation checks) are required to identify the cause of these. Point of use filters (POU) are fitted and changed on a regular basis with a PPM on the elevated counts (above 1000 cfu/l) to mitigate any risk for siderooms in Durrington Ward.

14.2 Routine water sampling results (Pseudomonas)
Routine sampling (six monthly of 250 + outlets) for Pseudomonas is completed in the following augmented areas:

- Avon Ward
- Plastics & Burns Unit
- NNU
- ICU (Radnor Ward)
- Pembroke Ward

The routine sampling for Pseudomonas commenced on 5th October 2017 and 2nd February 2018, there are currently no live counts from the sampling completed to date.

14.3 Flushing
The flushing of all outlets in clinical areas across the hospital continues, with the total percentage of flushing for quarters 1 and 2 of 2017/18 at 54.5%. Low figures were as a result of staff shortages within ETS and operational pressure in other areas. However, in an effort to improve compliance, the resource that completes this work had protected time moving forward.

Poor compliance continued into quarter 3 of 2017/18 at 39% despite interventions. Further changes have been implemented and as requested (at the January 2018 IPCC) a recovery plan has been produced. This was presented to members of the IPCWG on 1st February 2018.

ETS identified that they could improve practices and changed the method for flushing, with increased resource where necessary to improve overall compliance. The flushing compliance for January 2018 was 52% (using the old method), and 94.5% in February 2018 and 97% in March 2018 using the new plan. *(A copy of the recovery plan can be obtained from the Head of Estates).*

14.4 Copper/Silver Ionisation Plant
No recorded issues. Regular maintenance continues on the Silver/Copper ionisation plant serving the Spinal Unit and Central areas of the hospital supporting the overall management of Legionella.

14.5 Independent advice
The Trust AE is Mr Daniel Pitcher of the Water Hygiene Centre. The Trust has extended the contract with Water Hygiene Centre to June 2018.

14.6 Drain Blockages
It is clear that the message must not be lost in our management of the drainage system, regular broadcast e-mails are sent advising staff of the 'do's and don'ts' to prevent blockages. Reminders have also been cascaded to staff (at Matrons Monitoring Group (MMG) meetings) with regard to the correct procedure in the event of a flood/spillage, and the locations of spill kits which should be used in the event of a flood.

During quarters 3 and 4 of 2017/18, we have seen a spike in the number of blockages of the drainage system. Unfortunately a number of these are as a result of poor practice in respect of the disposal of wipes and hand towels. It is clear that more awareness and messaging needs to take

place with regard to this. This will be followed up via the MMG and other forums, with e-mail broadcasts to all staff groups.

15. Cleaning Services *(information provided by Michelle Sadler, Facilities Manager)*

This section summarises the key components of the Trust's cleaning programme, to ensure the provision of a safe clean environment for patients and their relatives, visitors and staff. This ongoing work is provided by the Housekeeping Department and Facilities directorate.

15.1 Patient led assessment of the care environment (PLACE) internal audits

The Trust has developed and implemented a programme of PLACE audits for 2017/18 and 48 internal assessments have been completed with the remaining 8 areas planned for completion before the end of May 2018.

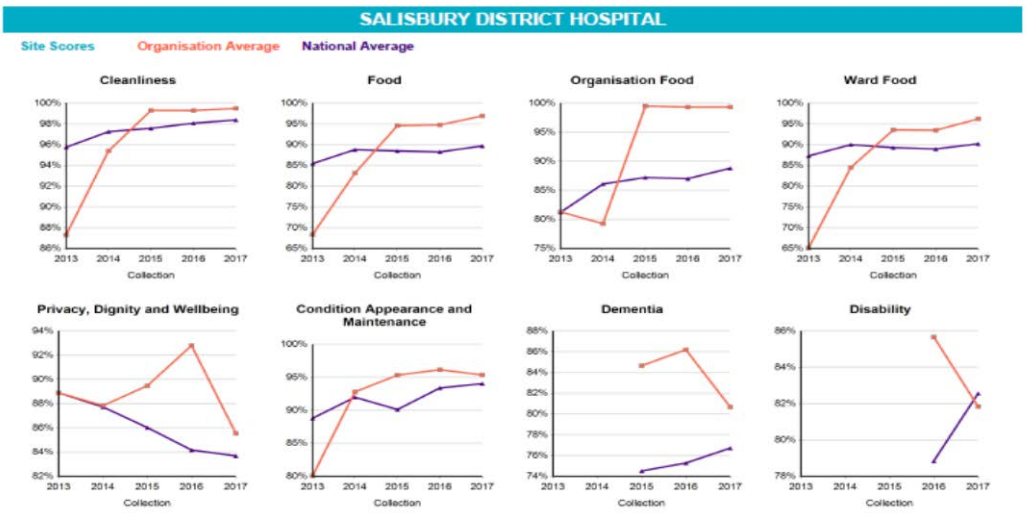
We continue to achieve active engagement and good support from Governors, Volunteers and the local Health Watch representatives to undertake the audits. Each ward produced their own action plans and reported progress via the monthly MMG meetings. Focus is given to themes from the ward or department and learning that can be shared with other areas.

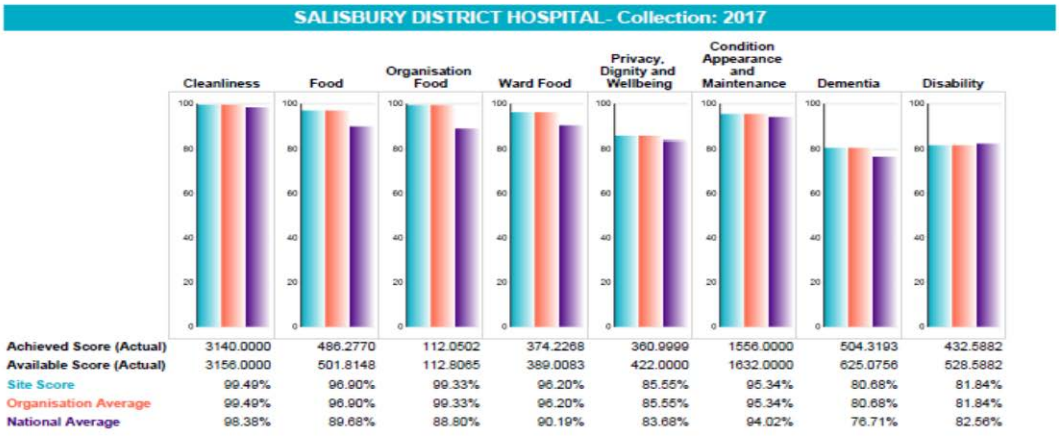
The PLACE internal audits have produced evidence that supports capital bids and decorating programmes so funds are appropriately allocated. The Dementia Lead for the Trust has also engaged with the PLACE programme, with a joint approach to environmental aspects to ensure this patient group is well supported within these criteria. A table top PLACE exercise is now also being undertaken at the planning stage, with ETS and ArtCare, for any new or refurbished departments/wards to better ensure that consideration is given to the criteria prior to its building completion. The results of each assessment are submitted using the PLACE 'Lite' tool linked to the Health and Social Care Information Centre.

15.2 National PLACE

The Trust participated in the National PLACE assessment on March 2nd 2017. A total of 10 wards and ED were visited, 4 food assessments undertaken, 6 OPD areas as well as external spaces and communal areas were also assessed as required under the PLACE criteria. The results reflect improvements have been made in most areas with the Trust score being published in August 2017.

The results from PLACE are analysed and key themes form the basis of improvement plans within the Trust. Below are the Trust scores against the national average for 2017.





The Trust is participating in the National PLACE Assessment for 2018 in May. A range of wards, outpatient areas, Emergency Department and external spaces will be audited during this assessment.

Table 11 below demonstrates the audits undertaken and the scores linked to the level of findings.

Area of Focus	KPI	APR 2017	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR 2018	Total
Cleaning	Total audits	96	96	112	96	111	95	95	111	96	109	90	94	1201
	Passes	56	53	60	50	60	55	52	68	58	66	54	56	688
	Qualified Passes	40	43	52	46	51	40	43	43	38	43	36	38	513
	Fails	0	0	0	0	0	0	0	0	0	0	0	0	0

Area of Focus	KPI	APR 2016	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR 2017	Total
Cleaning	Total audits	93	93	109	93	94	110	96	112	96	96	96	112	1200
	Passes	51	47	55	48	52	63	54	59	52	47	57	57	642
	Qualified Passes	42	46	54	45	42	47	40	53	44	49	39	55	556
	Fails	0	0	0	0	0	0	0	0	0	0	0	0	0

15.3 Terminal enhanced and double cleaning

Table 12 on page 26 illustrates the additional cleaning undertaken in clinical areas between April 2016 and March 2018 (excluding the deep clean planned programme).

Month/Year XX –Highest XX- Lowest	2016/17 Number of Terminal/ Post Infection Cleans	2016/17 Enhanced cleaning hours	2016/17 Double cleans in hours	2017/18 Number of Terminal/ Post Infection Cleans	2017/18 Enhanced cleaning hours	2017/18 Double cleans in hours
April	393	67	83.50	428	21	114.25
May	363	63.75	64	447	51.75	128
June	342	35.50	59.75	457	71.50	104.75
July	299	52.75	63.50	573	57	115
August	380	43.75	120	460	79.75	68.50
September	397	57.75	69.25	457	82.50	117.25
October	411	63.25	90.50	520	103.75	83.5
November	416	67.5	105.5	552	84.75	73.25
December	500	64.5	180.25	720	59.5	50.25
January	476	52.75	185	637	50.5	54.75
February	433	55.75	91.25	643	80.75	55.75
March	365	52	130.25	674	41.25	51.75
Year to Date total	**4775**	**676.25**	**1242.75**	**6568**	**784**	**1017**
Totals for Year	**6694**			**8369**		

15.4 Deep clean programme/rapid response team

The deep clean and decorating programme commenced in April 2017 *(a copy of the programme is available from the Housekeeping Department).* A monthly review of this plan is undertaken at MMG and discussed with the ICNs and DSN's at weekly meetings. Concerns have been raised that the Housekeeping Team cannot access a number of bays and siderooms due to bed pressures.

For those areas that are not deep cleaned, a contingency "scrub" plan of action has been agreed. This contingency scrub plan will continue to be monitored to better ensure all areas have a level of annual deep clean. These areas will be prioritised should they become available and the deep clean and GLOSAIR disinfection will be undertaken.

In addition to the deep clean programme, the demand on the GLOSAIR 400 room decontamination system remains high and reflects the robust measures in place to ensure appropriate infection control.

Table 13 below reflects the GLOSAIR 400 room decontamination activity in 2016/2017 and 2017/2018 to date.

2017/18 MONTH	APRIL	MAY	JUNE	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
GLOSAIRS (Not including Deep Clean Plan)	19	35	44	43	13	38	50	29	36	34	34	36
Total to date	411											
2016/17 MONTH	**APRIL**	**MAY**	**JUNE**	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**	**JAN**	**FEB**	**MAR**
GLOSAIRS (Not including Deep Clean Plan)	64	31	21	18	22	17	28	22	35	34	23	10
Total to date	325											

15.5 Housekeeping resource

Housekeeping were awarded additional funding, following a paper that was presented by the Head of Facilities (with a value of £171k) to the Executive Directors (January 2016) The Executive Directors agreed to fund a proportion of the paper with a value of £76,582 from October 2016.

This has enabled the Housekeeping department to extend their operational hours to include 20.00hrs to 23.45hrs every day, extend the weekend cover between the hours of 12noon to 16.00hrs, and increase the supervisors on shift to accommodate these extra operational hours. This change has seen an increase in the Housekeeping Department's ability to respond to post infection clean requests late into the evening (enabling quicker bed turnaround time), an ability to undertake deep clean and GLOSAIR disinfection at the weekend with staff on shift throughout the day.

If the demand on post infection cleans at these times are low, the resource is distributed to the deep clean plan or OPD areas. This extended service better ensure that cleaning resources can meet the demands on the service and ensure national cleaning standards and infection control needs are met.

Table 14 below shows the average number of cleans in extended hours (20.00hrs – 23.45hrs)

Type of clean	Day of week	Average number of cleans at this time/per month	
		Q1 & Q2	Q3 & Q4
Terminal cleans	Monday – Friday after 20.00hrs	43	50
	Saturday after 20.00hrs	8	7.5
	Sunday after 20.00hrs	6	7
Deep cleans & GLOSAIR	Monday – Friday after 20.00hrs	23	12
	Saturday after 20.00hrs	3	3
	Sunday after 20.00hrs	6	4

Housekeeping Services continue to strive to work in a multidisciplinary team way, communicating well and being responsive to the needs of our patients.

15.6 Improvement Work Projects

Housekeeping management team have undertaken a gap analysis review to identify what actions/changes would be required to fully implement the cleaning management tool advocated by the British Standards Institute (BSI). This was presented at the Joint Board of Directors on 20th September 2017 by Head of Facilities and General Manager Housekeeping, Staff Club, Porters and Linen Services. It was agreed, that this funding, would be requested as a cost pressure for 2018/2019 and the Housekeeping Team are awaiting an outcome of this cost pressure request.

Capital bids were submitted for two new decontamination units in 2017/18. Funding was approved and an order for two Bioquell hydrogen peroxide vapour (HPV) systems was placed in March 2018. The Bioquell systems were delivered mid-April 2018 and Housekeeping are now working with the Bioquell provider regarding the training requirement schedule for the team, prior to the system being put into operation.

16. Summary

This annual report has provided the Trust Board with evidence of the measures in place that have made a significant contribution to improving infection prevention and control practices across the Trust.

The report has detailed the progress against the Action Plan for 2017/18 in reducing HCAI rates for the Trust and the key priorities have included:

- Continued focus on the reduction of all reportable Trust HCAIs and ensure preventable infections are avoided.
- Ongoing reinforcement to improve compliance with hand hygiene practices and behaviours.
- Continued focus on antimicrobial stewardship.
- Monitor and manage decontamination services.

- Sustain progress with education, training and audit relating to infection control practices and policies.
- Monitor and manage water safety.
- Maintaining a clean and safe environment for patients and staff through the Trust Housekeeping service.

Appendix 1

Infection Prevention & Control – Annual Action Plan 2017/18

Please note: The numbering **does not** depict the order of priority for the Trust, but reflects the numbered duties within the Hygiene Code.

Domain and Key Actions	Who By	Status
1 Management, Organisation and the Environment **1.1 General duty to protect patients, staff and others from HCAIs** **1.2 Duty to have in place appropriate management systems for Infection Prevention and Control**		
Continue to promote the role of the DIPC in the prevention & control of HCAI	Chief Executive	Continuous
DIPC as Chair of the Infection Prevention and Control Committee	Chief Executive	In place
Lead infection prevention & control in the Trust and provide a six monthly public report to the Trust Board	DIPC	In place
Monitor and report uptake of mandatory training programme	IPCT	In place
Continue contribution to implementation of the Capacity Management policy	DIPC	In place
Ensure a programme of audit (incorporating Saving Lives High Impact Interventions) is in place to systematically monitor & review policies, guidelines and practice relating to infection prevention & control	IPCWG/IPCC	Monthly
Continue to review staffing levels via Workforce Planning	DDIPC	Continuous
Complete bedpan washer replacement and dirty utility room upgrade programme within the Trust (for inpatient clinical areas), including the Spinal Unit.	DIPC/RW	Complete
1.3 Duty to assess risks of acquiring HCAIs and to take action to reduce or control such risks		
Maintain the role of DIPC as an integral member of the Trust's Clinical Governance & risk structures (including Assurance Framework)	Chief Executive	Continuous
Ensure active maintenance of principle risks relating to infection prevention and control, and that the system of Root Cause Analysis (RCA) is used to review risks relating to these	DIPC/JH/IPCT	In place
Active Surveillance & Investigation:		
Continue implementation of mandatory Surveillance Plan for HCAI & produce quarterly reports for IPCC	ICNs	In place
Review implementation of 'alert organism' & 'alert condition' system	JH/SC/PR	Continuous
Use comparative data on HCAI & microbial resistance to reduce incidence & prevalence	JH/SC/PR	In place
Promote liaison with Public Health England (PHE) for effective management & control of HCAI	DIPC/JH/IPCT	Continuous

Domain and Key Actions	Who By	Status
1.4 Duty to provide and maintain a clean and appropriate environment for health care		
Ensure maintenance and monitoring of high standards of cleanliness via policy management and audit, and environmental audits	DIPC/IR/MS	Monthly
Review schedule of cleaning frequency and standards of cleanliness, making them publicly available	DIPC/IR/MS/ Matrons	Monthly
Ensure adequate provision of suitable hand washing facilities, hand products/alcohol gel and continued implementation of 'WHO - Five Moments' and use of 'CleanYourHands' resources	IPCT	Continuous
Continue IP&C involvement in overseeing all plans for construction & renovation	TC	Continuous
Ensure effective arrangements are in place for appropriate decontamination of instruments and other medical devices/equipment	DIPC/SJ	Continuous
Ensure the supply and provision of linen and laundry adheres to health service guidance	IR	Continuous
Ensure adherence to the uniform and BBE policies and workwear guidance through audit and formal reporting via the monthly Matrons Monitoring Group meetings	DIPC/DSNs	Continuous
1.5 Duty to provide information on HCAIs to patients and the public **1.6 Duty to provide information when a patient moves from one health care body to another** **1.7 Duty to ensure co-operation**		
Ensure publication of DIPC report via the Trust website	DIPC	6 monthly
Review Capacity Management policy & documentation to ensure communication regarding an individual's risk, nature and treatment of HCAI is explicit	DIPC	Completed
Include obligations under the Code to appropriate policy documents	DIPC	Ongoing
1.8. Duty to provide adequate isolation facilities		
Continue implementation and monitoring of the Isolation policy and monitoring of practice via audit	DSNs/IPCT	Ongoing
1.9. Duty to ensure adequate laboratory support		
Ensure the microbiology laboratory maintains appropriate protocols and operations according to standards acquired for Clinical Pathology Accreditation	JH/SC/PR	Continuous

Domain and Key Actions	Who By	Status
1.10 Duty to adhere to policies and protocols applicable to infection prevention and control		
Core policies are:		
Standard infection control precautions	ICNs	In place
Aseptic technique	ICNs	In place
Major outbreaks of communicable infection (Outbreak policy)	ICNs	In place
Isolation of patients	JH	In place
Safe handling and disposal of sharps	PK/GL	In place
Prevention of occupational exposure to blood-borne viruses (BBVs), including prevention of sharps injuries	ICNs	In place
Management of occupational exposure to BBVs and post exposure prophylaxis.	HL	In place
Closure of wards, departments and premises to new admissions (Outbreak & Capacity Management)	JHo/SK	In place
Disinfection policy	MS	In place
Antimicrobial prescribing	JH/ET	In place
Mandatory reporting HCAIs to the HPA	JH	In place
Control of infections with specific alert organisms; MRSA and C. difficile	IP&CT	In place
Additional policies:		
Transmissible Spongiform Encephalitis (TSE)	JH	In place
Glycopeptide Resistant Enterococcus (GRE)	JH	Included in
Acinetobacter species	JH	Isolation
Viral Haemorrhagic fever (VHF)	JH	Policy
Prevention of spread of Carbapenem resistant organisms	JH	In place
Diarrhoeal infections	JH	In place
Surveillance	ICNs	In place
Respiratory viruses (RSV)	JD	In place
Infection control measures for ventilated patients	MF	In place
Tuberculosis	JH	In place
Legionellosis risk management policy and procedures, including pseudomonas	TC	In place
Strategic Cleaning Plan & Operational Policy	MS	In place
Building & Renovation – Inclusion of Infection Control within Building Change, Development & Maintenance	TC	In place
Waste Management Policy	PJ	In place
Linen Management Policy	ICNs	In place
Decontamination of medical devices, patient equipment & endoscopes	SJ	In place

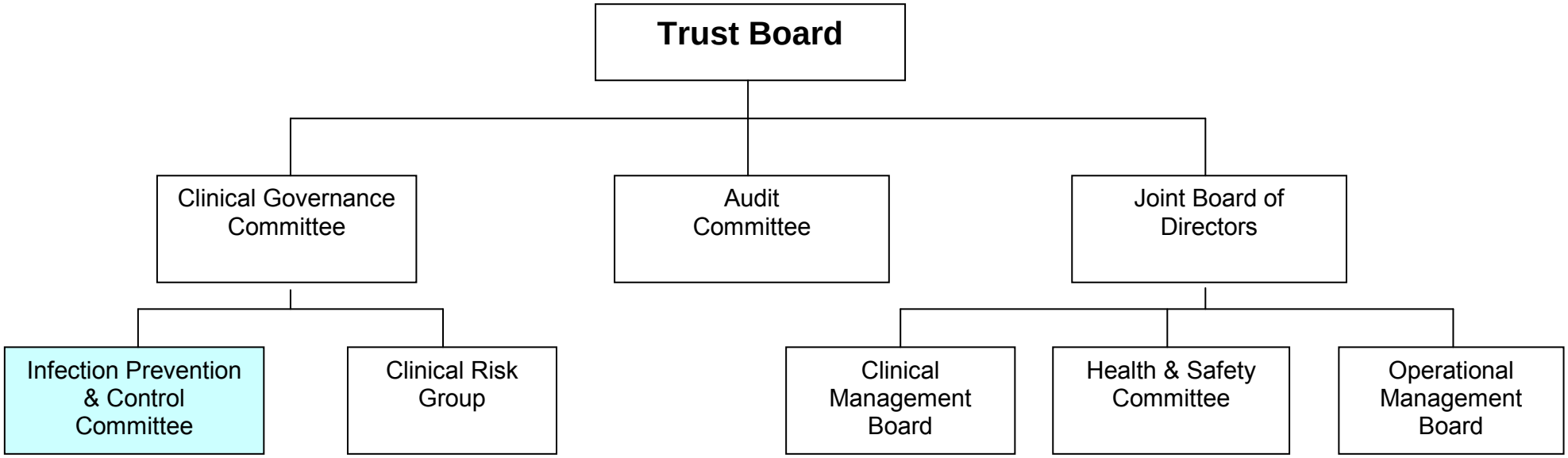
Domain and Key Actions	Who By	Status
1.11 Duty to ensure, so far as is reasonable practicable, that healthcare workers are free of and are protected from exposure to communicable infections during the course of their work, and that all staff are suitably educated in the prevention and control of HCAIs.		
Ensure all staff can access relevant occupational health & safety services (OHSS)	PH	Continuous
Ensure occupational health policies on the prevention and management of communicable infections in healthcare workers, including immunisations, are in place	HL	Continuous
Continue the provision of infection prevention and control education at induction	IPCT	Continuous
Continue the provision of ongoing infection prevention and control education for existing staff	IPCT	Continuous
Continue recording and maintaining training records for all staff via the MLE	Education Dept.	Continuous
Ensure infection prevention and control responsibilities are reflected in job descriptions, appraisal and objectives of all staff	DIPC/DMTs	In place
Enhance and monitor the role of the Infection Control Link Professionals	DSNs/ICNs	Continuous

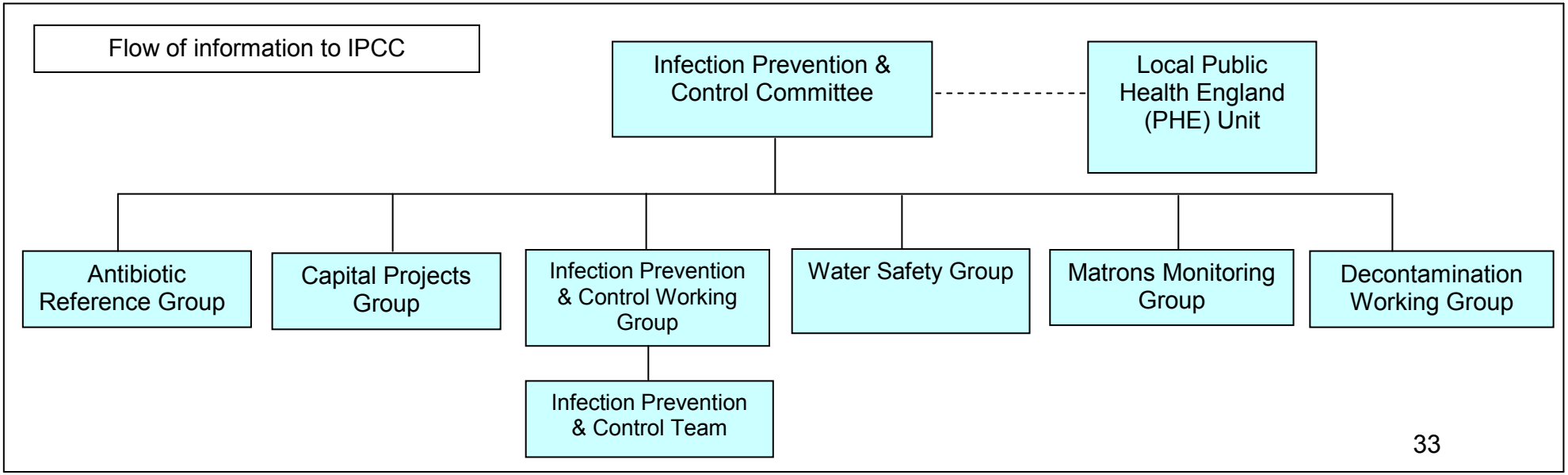
KEY INITIALS

DIPC	Lorna Wilkinson, Director of Infection Prevention & Control (DIPC)
DDIPC	Denise Major & Fiona Hyett, Deputy DIPCs
SJ	Sarah Jennings, Decontamination Lead *(then Fiona McCarthy during quarter 3 of 2017/18)*
JH	Julian Hemming, Consultant Microbiologist & Infection Control Doctor (ICD)
SC	Stephen Cotterill, Consultant Microbiologist & Deputy ICD
PR	Paul Russell, Consultant Microbiologist & Antimicrobial Lead
IR	Ian Robinson, Head of Facilities
TC	Terry Cropp, Responsible Person for Water & Head of Estates
DSNs	Directorate Senior Nurses
JHo	Janet Hope, Head of Patient Flow *(then Sarah Knight during quarter 2 of 2017/18)*
PK	Paul Knight, Health & Safety Manager, OH Department
GL	Geoff Lucas, Safety Advisor, OH Department
HL	Heidi Lewis, Manager OH Department *(left during quarter 2 of 2017/18)*
ET	Louise Williams, Principal Pharmacist
JD	Jacqui Dalley, Neonatal Unit Sister
MF	Maria Ford, Nurse Consultant in Critical Care
PJ	Paul Jackson, Energy and Waste Manager, Facilities
PH	Paul Hargreaves, Director of Human Resources
MS	Michelle Sadler, Facilities Manager

Appendix 2

Formal Trust Reporting Structure





Appendix 3

Infection Prevention & Control Annual Audit & Policy Review Programme 2017/18

No	Aim	Audit	When by/How	Person(s) responsible/main author
1	Active surveillance & investigation.	Mandatory SSIS - Orthopaedic Surgery	Yearly, with minimum data set of 50 cases and/or 3 month period.	Facilitated by ICNs, including key personnel from relevant areas.
		Root Cause Analysis (RCA)/Post Infection Review (PIR)/incident investigations/SWARM meetings – • Mandatory alert organisms (MRSA, MSSA & E.coli bacteraemias & C.difficile infection) • Outbreaks e.g. Norovirus, C.difficile • PII e.g. C.difficile • Targeted others e.g. Tuberculosis, VRE	As required, within agreed timeframes.	Led by the ICD, DIPC and ICNs, including key personnel from affected areas.
2	Reduction of infection risk from the use of catheters, tubes, cannulae, instruments & other devices.	Patient Safety Work – ongoing implementation of care bundles e.g. central line & peripheral vascular devices.	Work continues to progress within the clinical areas.	Clinical Leaders/DSNs and educational support from key staff, with support from ICNs.
		Saving Lives: High Impact Interventions (HII).	• Priorities & timescales agreed with DIPC. • Plus, targeted audits.	Clinical Leaders/DSNs IPCT
3	Reduce the reservoirs of infection.	Environmental & equipment cleanliness	• Priorities & timescales agreed with DIPC. • Plus, targeted audits.	Clinical Leaders/DSNs IPCT
		In house Patient Led Assessment of the Care Environment (PLACE) visits.	Programme led by Facilities Directorate.	Facilities/Housekeeping Manager with the involvement of DMTs.
4	High standards of hygiene in clinical practice.	Hand hygiene, including Isolation nursing and use of personal protective equipment (PPE).	• Priorities & timescales agreed with DIPC. • Plus, targeted audits.	Clinical Leaders/DSNs IPCT

No	Aim	Audit	When by/How	Person(s) responsible/main author
5	Prudent use of antibiotics.	Antibiotic prescribing & usage.	Action Plan agreed & monitored by the Antibiotic Reference Group (ARG).	Chief Pharmacist & Antimicrobial Pharmacist
6	Management & organisation – • Policy, guideline & information development & review programme (review dates according to ICID or SDH intranet site).	Patient information leaflet – Acinetobacter.	Review January 2021.	ICNs.
		Microbiology/Infection Control Alerts Policy.	Review February 2019.	Deputy ICD.
		Aseptic procedure.	Review February 2021.	ICNs.
		Central Line Policy	Review June 2019.	Sarah Clark (Radnor Ward).
		Clostridium difficile Policy.	Review February 2018.	ICD.
		Patient information leaflet – C.difficile.	Review February 2021.	ICNs.
		Contractors/Procurement information leaflet – infection prevention in hospital.	Review June 2018.	ICNs.
		Creutzfeldt Jakob Disease (CJD) Policy.	Review May 2019.	Decontamination Lead & ICD.
		Decontamination Policy.	Review March 2020.	Decontamination Lead.
		Patient information leaflet – ESBL.	Review April 2020.	ICNs.
		Glove Usage Policy & Chart.	Under review 2017.	ICNs.
		Patient information leaflet – Group A Strep (GAS).	Review February 2019.	ICNs.
		Staff information leaflet – Hand Hygiene.	Review January 2021.	ICNs.
		Infection Control Policy.	Review July 2018.	ICNs.
		Infection Prevention & Control Practice in the Operating Department.	Under review 2017.	Lucinda Pluck (Main Theatres Department)
		Inpatients with diarrhoea algorithm.	Review October 2018.	ICNs.
		Isolation Policy (including diarrhoeal infections & other alert organisms).	Review March 2019.	ICD.
		Hand Hygiene Policy.	Review July 2018.	ICNs.
		Patient information leaflet – Invasive GAS Disease.	Review February 2019.	ICNs.
		Linen Management Policy.	Review February 2020.	ICNs.
		Legionellosis Management & Water Safety Policy.	Review February 2019.	Terry Cropp.
		Clinical Management of MRSA Policy.	Review November 2018.	ICD.

No	Aim	Audit	When by/How	Person(s) responsible/main author
6	Continued	Patient information leaflet – MRSA your questions answered.	Review January 2021.	ICNs.
		Patient information leaflet – MRSA Contact.	Review November 2019.	ICNs.
		Patient information leaflet – MRSA Screening.	Review July 2018.	ICNs.
		Outbreak Management Policy.	Review July 2020.	IPCT.
		Norovirus Management & Outbreak Policy.	Review July 2020.	IPCT.
		Patient information leaflet – Norovirus.	Review February 2019.	ICNs.
		Patient information leaflet – 'Now that I am in Isolation – some practical advice'.	Review November 2019.	ICNs.
		Prevention of Occupational Exposure to Blood Borne Virus Policy.	Review November 2019.	ICNs.
		Prevention of Spread of CRO Policy.	Review July 2020.	ICD.
		Patient information leaflets – CPE C3 – Colonised. C4 – Carrier. C5 – Contact.	Review July 2020.	ICNs.
		Peripheral Venous Cannulation Policy.	Review July 2018.	ICNs.
		Patient information leaflet – Having a 'drip' (peripheral venous cannula)	Review February 2019.	ICNs.
		Standard Precautions Policy.	Review November 2018.	ICNs.
		Surveillance Policy.	Review January 2019.	ICNs.
		Taking Blood Cultures Policy – Adults.	Review May 2020.	IPCT.
		Tuberculosis Infection Control Policy.	Under review 2017.	ICD.
		Ebola & other VHFs Policy.	Reviewed 2017.	ICD.
		Control of GRE Policy.	Review July 2020.	ICD & Deputy ICD.
		Patient information leaflet – GRE.	Review September 2018.	ICNs.
		Patient information leaflet – Hygiene advice for patients about controlling spread of infections.	Review November 2018.	ICNs.
		Staff information – MERs CoV.	Review September 2018.	ICD.