East and North Hertfordshire NHS
NHS Trust

Infection Prevention & Control Annual Report – 2016-17

1. Executive Summary and Headlines

The purpose of this report is to inform and provide assurance to the Trust Board, East and North Hertfordshire Clinical Commissioning Group, patients, public and staff. It provides an overview of the key work at East and North Hertfordshire NHS Trust with regard to infection prevention and control for the reporting period 1 April 2016 to 31 March 2017, and demonstrates the progress made against performance targets and compliance with the Health and Social Care Act 2008 (Reviewed 2010): *Code of Practice for the NHS on the prevention and control of infections and related guidance.*

The Trust has declared compliance with the Hygiene Code and continues to be registered with the CQC, without conditions, across all sites.

The Trust continues to regard patient safety in relation to the prevention of Health Care Associated Infections (HCAI) as a key priority for the organisation.

	Headlines and Key Achievements	**Further information**
1	**MRSA bacteraemia** Two cases of Trust allocated MRSA bacteraemia were identified. One was from a blood culture taken from a patient in the Emergency Department and the other was from a patient in the stroke unit.	**Page 5**
2	***Clostridium difficile*** 22 cases of *C difficile* were allocated to the Trust against a ceiling of 11. Following a review of these cases, 11 were successfully appealed and therefore no financial sanctions were levied by the Clinical Commissioning Group (CCG).	**Page 6**
3	**Carbapenemase Producing Enterobacteriaceae (CPE)** 15 patients were identified with a carbapenemase resistant organism during the year. There was evidence of one case of transmission on a surgical ward which triggered an invitation to Public Health England to review the incidence and processes to control transmission of this organism. The outcome of this review provided assurance that there is not an ongoing outbreak with this organism and effective processes to control transmission are in place. However minor recommendations were made which are to be reviewed and actioned.	**Page 6**

2. Compliance with the Health and Social Care Act 2010

The Care Quality Commission (CQC) has used the Code of Practice as a key feature of registration. Failure to observe the Code may either result in an improvement notice being issued to the Trust by the CQC following an inspection, or in it being reported for significant failings and placed on "special measures". All NHS organisations must be able to demonstrate that they are complying with the Code. The Trust's Risk and Quality Committee and Board have continued to receive monthly reports on Infection Control performance and compliance during the reporting year.

3. Compliance with Criterion 1: a- Systems to manage and monitor the prevention and control of infection

Infection prevention and control (IPC) is the responsibility of everyone in the organisation. Key roles and arrangements are detailed below:

3.1 Infection Prevention and Control Structure

The Chief Executive Officer has overall responsibility for the control of infection within East and North Hertfordshire NHS Trust.

3.2 Senior IPC Management Team

The senior IPC management team, comprising the Director of Infection Prevention and Control (DIPC), the Infection Control Doctor (ICD), the Assistant DIPC (ADIPC) and the Antimicrobial Pharmacist, meet monthly to discuss activity and issues.

3.2.1 The Director of Infection Prevention and Control

The DIPC role is held by the Director of Nursing and is the Executive Lead for the IPC service, reporting directly to the Chief Executive. The role includes:

- Overseeing implementation of the IPC plan as Chair of the Trust Infection Prevention and Control Committee (TIPCC)
- Approving the Annual IPC report for public release.
- Authority to challenge inappropriate practice

3.2.2 The Infection Control Doctor (ICD)

The ICD is the Clinical Lead for the IPC service, reporting to the DIPC on IPC matters. The role includes:

- Advising and supporting the DIPC
- Overseeing local IPC policies and their implementation by ensuring that adequate laboratory support is in place
- Chairing the Water Safety Group (which replaced the Pseudomonas Risk Assessment Group and the Legionella Steering Group).
- Supervising IPC education for doctors and delivering mandatory training lectures
- Providing expert clinical advice on infection management
- Managing an infection control doctor service level agreement with the Hertfordshire Community NHS Trust
- Producing, together with the assistant DIPC, the annual IPC report
- Authority to challenge inappropriate practice including inappropriate antibiotic prescribing decisions

3.2.3 The Assistant DIPC / IPC Lead Nurse

The ADIPC / IPC Lead Nurse reports directly to the DIPC and works with the ICD. The role includes:

- Advising and supporting the DIPC and the ICD
- Chairing the TIPCC Meetings in the absence of the DIPC
- Chairing the Joint IPC monthly meeting of Consultant Microbiologists, Nursing Team and Antimicrobial Pharmacist
- Deputising for the DIPC in her absence
- Managing and chairing the Divisional IPC Committees which meet monthly and report to the TIPCC and Divisional Boards
- Leading the Trust Decontamination service
- Responsible for the delivery of IPC training for all Trust staff with the exception of the doctors
- Ensuring that all policies and guidelines related to infection prevention are valid and implemented across the service
- Managing the infection control nurses' service level agreement with one external hospice
- Producing together with the DIPC and the ICD, the IPC Strategy, Annual Plan, and Annual IPC Report.
- Line managing the IPC Nursing Team

3.3 The Infection Prevention and Control Nursing Team

In 2016-17 the team consisted of:

1.0	WTE	Assistant DIPC	(Band 8d)
1.0	WTE	Lead Nurse	(Band 8b)
2.4	WTE	Clinical Nurse Specialists Infection Control	(Band 7)
1.0	WTE	Infection Control Nurse	(Band 6)
1.0	WTE	Infection Control Clinical Support Worker	(Band 4)
0.4	WTE	IPC team and data coordinator	(Band 5)

The Surgical Site Surveillance Nurse is also part of the wider team

1.0	WTE	Surgical Site Surveillance Nurse	(Band 6)

3.4 The Consultant Microbiologists

In addition to the Infection Control Doctor, the Trust employs two more consultant medical microbiologists (CMMs) who play an active role in IPC. There is cover 24 hours a day, 7 days a week provided by a CMM for clinical microbiology/Infection control.

3.5 The Antimicrobial Pharmacist

The Trust employs an Antimicrobial Pharmacist who works closely with the ICD and other members of the IPC team. There is robust management of antimicrobial stewardship throughout the Trust. The Antimicrobial Pharmacist is secretary of the Trust Antimicrobial Forum (TAF), a sub-committee of the New Drugs and Formulary Committee.

The role of the Antimicrobial Pharmacist also includes:

- Attending and contributing to the Trust Infection Prevention and Control Committee meetings and the Joint Infection Prevention and Control Committee meetings (with the infection control team)
- Supporting antimicrobial stewardship initiatives by working closely with the ICD and the CMMs
- Joining and contributing to Antimicrobial Ward Rounds with the CMMs
- Carrying out audits in line with national guidance
- Providing training regarding antimicrobial stewardship to clinical staff within the Trust

3.6 The Trust Infection Prevention and Control Committee (TIPCC)

The TIPCC meets 11 times a year (not August) and reports to the Trust Board via the Risk and Quality Committee. The Committee is chaired by the DIPC. Membership includes Medical Consultant IPC leads from all specialities, the local Consultant for Communicable Disease Control, the Infection Prevention and Control Nurse from the CCG, a Health at Work representative, the Clinical Governance officer, Head of Estates and Facilities, education leads, matrons and the antimicrobial pharmacist. The terms of reference and membership were reviewed in 2015.

3.6.1 Medical Consultant Infection Prevention and Control Leads

Each speciality has a designated Consultant lead who forms the link between the division and the Trust Infection Prevention and Control Committee. Their role includes a bi-monthly report on local infection prevention issues, taking back information to their divisions and working with the divisional matrons on new clinical initiatives and the resolution of local issues, supported by the ADIPC / Lead nurse for IPC at monthly divisional meetings.

4. Compliance with Criterion 1: b- Monitoring the prevention and control of infection

4.1 Mandatory Surveillance

Mandatory surveillance is carried out for MRSA, MSSA and *Escherichia coli* (*E.coli*) bacteraemia cases, cases of *Clostridium difficile* infection and surgical site infection in elective total hip and knee replacement and fractured neck of femur surgery.

Meeting the targets for healthcare associated infections in the coming year will require continued vigilance in applying measures that have been shown to have significant impact, combined with the introduction of a number of new initiatives including:

- The introduction of a PHE surveillance programme for Catheter related blood stream infection in the Critical Care Unit
- Enhanced audits by the IPC team of practice across all wards, reporting back to TIPCC, Divisional meetings and Ward Managers
- Review of medical staff training in blood culture taking and the avoidance of contamination of blood culture bottles

4.1.1 MRSA blood stream infections (BSI)

Isolates of MRSA (Meticillin Resistant *Staphylococcus Aureus*) from blood cultures have been reported since 2002; enhanced reporting using the Health Protection Agency (HPA) MRSA Data Capture System began in 2006. National and local MRSA bacteraemia figures may be seen at:
https://www.gov.uk/government/collections/staphylococcus-aureus-guidance-data-and-analysis

The table below shows the performance of the Trust since the introduction of Mandatory Surveillance targets in 2005. Red font indicates MRSA blood stream infections (BSI) numbers exceeding yearly targets.

Year	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2015-2015	2015-2016	2016-2017
Trust total	**58**	**53**	**33**	**18**	**10**	**5**	**3**	**2**	**2**	**5***	**0**	**2**
Target	**39**	**31**	**22**	**21**	**15**	**3**	**3**	**3**	**0**	**0**	**0**	**0**

** 5 cases reported (4 avoidable, 1 unavoidable)*

4.1.2 *Clostridium difficile*-associated disease (CDAD)

Clostridium difficile is a type of bacterium found in the gut that can cause diarrhoea in certain circumstances. It can cause a spectrum of symptoms from mild disease to severe colitis.

The incidence of *C.difficile* infection has reduced nationally year on year for the past ten years. National and local results can be seen at:
https://www.gov.uk/government/collections/clostridium-difficile-guidance-data-and-analysis

The table below shows the performance of the Trust since the introduction of Mandatory Surveillance in 2004. Red font indicates CDAD numbers exceeding yearly targets.

Year	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2015-2015	2015-2016	2016-2017
Total	**474**	**487**	**594**	**457**	**108**	**81**	**56**	**12**	**13**	**14**	**12**	**15**	**22(11)***
Target	**n/a**	**n/a**	**n/a**	**414**	**183**	**90**	**63**	**65**	**14**	**14**	**15**	**11**	**11**

**11 cases were appealed to the CCG successfully. Therefore no financial sanctions were levied by the CCG*

4.1.3 Other Mandatory Surveillance organisms

The Trust also reports on BSI caused by Methicillin Sensitive *Staph Aureus* (MSSA) and *E. Coli*. The table below shows the numbers of hospital associated BSI from 2011/12.

Bacteraemia	MSSA	*E coli*
2011/12	18	30
2012/13	15	43
2013/14	9	53
2014/15	15	38
2015/16	14	24
2016/17	17	38

4.2 Incidents related to infections (including outbreaks)

4.2.1 Carbapenemase resistant organisms (CPE/CRE)

15 cases of these highly resistant microorganisms were identified in Trust patients during the past year. A significant proportion of these cases were imported and several other cases had no identified risk factors. Following the one identified incident involving transmission on one of the wards, Public Health England were invited to review the cases and the Trust processes to control transmission of these microorganisms. The provisional findings indicate that, apart from the above case, there was no evidence of an outbreak. Additionally, the Trust's infection prevention and control processes and practices are appropriate to prevent transmission of this microorganism. Some minor recommendations were made as a result of the PHE visit and these have been reviewed and will be incorporated into the annual plan for the current financial year.

4.2.2 Norovirus/ Influenza Outbreaks

Nationally, Norovirus activity was low in 2016/17. PHE observed that Laboratory reports of Norovirus in the current season are 20% lower overall compared to the five year seasonal average (from season 2011/12 to season 2015/16).

Locally, the Trust has controlled Norovirus outbreaks over this winter season with prompt responses including bay closures. However no ward closures were necessary. In total, 3 bay closures were required for diarrhoea and vomiting incidents.

Influenza outbreaks were also detected at an early stage enabling prompt responses including bay closures in 3 cases.

4.2.3 MRSA increased incidence

An increased incidence of MRSA carriage was identified on an elderly care ward which necessitated the temporary closure of a bay. None of these patients had an infection with MRSA.

4.3 Antimicrobial stewardship

The 2016-17 Antimicrobial Resistance (AMR) CQUIN had two parts:

- Part a : focused on reduction in antibiotic consumption per 1000 admissions
- Part b : focused on empiric review of antibiotic prescriptions.

All of the targets set by PHE were achieved due to the joint effort of clinicians, microbiology, infection prevention and control and pharmacy teams – see below for results:

Antimicrobial stewardship CQUIN 2016-17 – Part A	
18% reduction in total antibiotic consumption (target 1%) 23% reduction in piperacillin-tazobactam (target 1%) 2% reduction in carbapenems (target 1% reduction by end Q4)	Achieved
Antimicrobial stewardship CQUIN 2016-17 – Part B	
Q1: 74% of cases reviewed within 72 hrs (target 25%). Q2: 88% of cases reviewed within 72 hrs (target 50%) Q3: 82% of cases reviewed within 72 hrs (target 75%) Q4 to: 93% reviewed within 72 hrs (target 90%)	Achieved

- The total consumption of antibiotics (with special attention to Carbapenems and piperacillin-tazobactam) was monitored monthly and outcomes fed back to the Trust
- Teams with highest use of broad spectrum antibiotics received extra support in terms of Antimicrobial Stewardship (AMS) ward rounds to facilitate timely review of antibiotics
- The number of AMS wards rounds was increased to 10 a week (three on the Intensive Therapy Unit (ITU), two meropenem focused, one on gastro wards, one for acute medicine, ambulatory care, infection prevention and control and orthopaedic)
- Microbiology presence in multi-disciplinary teams with input on antimicrobial prescribing
- Introduction of procalcitonin testing to ITU helped to reduce total consumption of antibiotics including broad spectrum.

To achieve the 72 hour empiric review, the following measures were carried out:

- Wards pharmacists prompted doctors/ microbiologists for a timely review of antibiotics
- Audit results were shared with junior doctors, matrons and pharmacists
- Results were analysed by ward and division to identify key areas for intervention
- Teaching sessions were organised for doctors and pharmacists

Stringent CQUIN targets for 2017-18 have been set – see table below:

Antimicrobial stewardship CQUIN 2017-18 – Part A
2% reduction in total antibiotic consumption, piperacillin-tazobactam and carbapenems
Antimicrobial stewardship CQUIN 2017-18 – Part B
72hour review targets for sepsis patients on antibiotics who are still inpatients at 72 hrs. Targets are: Q1 – 25%; Q2 – 50%; Q3 – 75%; Q4 – 90%)

4.4 Surgical site infection

It is a mandatory requirement to conduct surveillance of orthopaedic surgical site infections using the Surgical Site Infection Surveillance Service of Public Health England. The minimum requirement is for a three month module of surveillance of *one* of the following Orthopaedic options:

- Open reduction of long bone fracture
- Total Hip Replacement (THR)
- Total Knee Replacement (TKR)
- Repair Neck of Femur Fracture (RNoF)

The Trust opted to undertake surveillance for three of these categories, namely THR, TKR and RNoF for the full twelve months for 2016/17. See table below.

Surgical site infection rates:

Category of surgery	National benchmark	ENHT 2016
Total Knee Replacements	0.6%	1.9%
Total Hip Replacements	0.7%	1.8%
Repair Neck of Femur Fracture (RNoF)	1.3%	1.8%

These results demonstrate a reduction in infection rates from previous years. However, we continue to work with all stakeholders to maintain these improvements and to achieve our aim of reducing the infection rates associated with these procedures in line with the national benchmarks (see table above). To oversee this improvement programme, a surgical site infection group meets regularly and reports progress to the Trust Infection Prevention and Control Committee.

4.5 Point prevalence survey of healthcare associated infections and antimicrobial use in European acute care hospitals

In October 2016, all inpatients at Lister and Mount Vernon were reviewed in accordance with internationally agreed criteria, to establish prevalence of healthcare associated infections and antibiotic prescribing. The purpose of the study was to provide data to identify future priorities for infection control, and to benchmark the Trust against other national and international organisations. Results have been received for the Trust and benchmark results are awaited which will inform the annual plan for the current year.

5. Criterion 2: Clean and appropriate environment

5.1 Cleaning Services

East and North Hertfordshire NHS Trust has a responsibility to provide and maintain a clean and appropriate environment for healthcare. With a higher profile on improving cleanliness in hospitals this is now a key element of how each hospitals performance is judged and it is assessed in a number of ways which feature in the Care Quality Commission's (CQC) Essential Standards of Quality and Safety.

The majority of services are managed by external companies. G4S provides services for Lister and Hertford County Hospital. The outcomes are aligned to the National Specifications for Cleanliness in the NHS (2007). The contract with G4S is currently in the third year and is managed and monitored by the Facilities Department at Lister Hospital. The current contract is working within the National Specification for Cleanliness in the NHS (2007) and certain areas have been reviewed under PAS 5748:2014.

Cleaning services at the New QEII are provided by Accuro. Mount Vernon Cancer Centre services are provided in-house by the Hillingdon Hospitals NHS Foundation Trust. Services in the satellite renal dialysis units at Harlow, St Albans and Luton & Dunstable are managed through service level agreements with the respective Trusts that they are located in. Cleaning services for the Bedford Unit are managed by an external company, Cleaning Matters.

5.1.2 Monitoring arrangements

The Domestic Contractor is required to carry out technical monitoring of cleaning standards. The frequencies set out in the National Specification for Cleanliness (2007) (NSC) must be met as a minimum, as detailed below:

Risk	Minimum Frequency	Minimum Score
Very High Risk	Over a period of a week all areas to have been audited at least once.	98%
High Risk	Over a period of a month all areas to have been audited at least once.	95%
Significant Risk	Over a period of quarter of a year all areas to have been audited at least once.	85%
Low Risk	Over a period of a year all areas to have been audited at least twice.	75%

The Trust employs a team of dedicated Contract Monitoring Officers who undertake random cleanliness inspections of functional areas, normally on a 13 week cycle but they are not restricted to any number of audits. These audits may also be undertaken in response to contractor technical audit results and/or complaints/nursing requests. Wherever possible these audits are conducted on a joint basis with the contractor, Matron and Ward management.

These audits are recorded utilising a mixture of the technical and managerial audit tools outlined in the NSC and a percentage score is produced for each. This is then shared with the department and consolidated into a monthly performance percentage defined by site and published on the Trust's intranet system and in public areas of the Trust on the Facilities Information Notice Boards.

G4S and Clinical Trust staff jointly check all areas within the hospital at a frequency set out in NSC as a minimum. The reason for joint auditing is to ensure that high standards of cleanliness are maintained and that any slippage is recognised and corrected through working to national targets that measure performance over a range of factors. It is good practice to establish a management system that supports continuous improvement and empowers Matrons and Ward Sisters to be involved in maintaining and monitoring cleanliness standards. The Facilities Contract Monitoring team oversea the processes in place to ensure continuity of service delivery.

Each week cleaning audit results are reported to the Director of Nursing and each month all cleaning audit reports are presented to the Divisional Infection Prevention and Control meeting by the Facilities team where scoring will be examined by the Nursing and Infection Prevention and Control Teams. Cleaning action plans are produced for any improvements that may be required following audits. Audit meetings also examine the levels of joint monitoring achieved.

Ward Sisters/Charge Nurses, Matrons and Divisional Nurses undertake the bi-weekly cleaning/environmental audit in their clinical areas. Failure to achieve 95% compliance with the cleaning audit triggers actions to bring cleaning up to the required standard. Cleaning is discussed at the Divisional Infection Prevention and Control meetings and is monitored at monthly contract meetings.

5.2 Environmental Monitoring

5.2.1 Water Safety

East and North Hertfordshire NHS Trust accept its responsibility under the Health and Safety at Work etc. Act 1974 and the Control of Substances Hazardous to Health Regulation 2002 (as amended), to take all reasonable precautions to prevent or control the harmful effects of contaminated water to residents, patients, visitors, staff and other persons working at or using its premises.

During March 2013 the Department of Health issued an Addendum to the current HTM 04-01 – Pseudomonas aeruginosa – advice for augmented care units. Following this advice the Legionella Steering Group Committee and the *Pseudomonas* Risk Assessment and Management (PRAM) Group were amalgamated to create a Water Safety Group.

The Water Safety Group was formed in July 2013. Attendees agreed the following Terms of Reference:

The Water Safety Group will meet quarterly and membership will consist of the following personnel:

- The Director of Infection Prevention and Control (DIPC) or nominated representative
- Infection Prevention and Control Nursing Team
- Consultant Microbiologist (Chair)
- Divisional Manager/Nursing Services Manager
- Head of Estates or nominated representative
- Head of Capital Planning states or nominated representative
- Head of Hotel Services or nominated representative
- Head of Medical Engineering/Physics or nominated representative
- External Consultants
- Trust Risk Manager/Trust Health and Safety Advisor (as and when required)
- Trust Quality Control Principal Pharmacist

The above terms of reference and core membership is under review with the purpose of improving clinical staff and department head attendance.

The purpose of the Committee is:

- To accept ownership of Risk Management for, and to monitor and advise on, Water Safety across the Trust, in line with the Trust's Water Safety Plan

- To ensure compliance with relevant DH Water systems HTM 04-01, statutory and mandatory guidance documentations

During the year, water sampling was carried out in accordance with respective mandatory requirements for Legionella and Pseudomonas. Where positive samples were identified, action was taken and recorded in each instance to ensure that the safety of the water supply was maintained.

Estates carry out quarterly Total Viable Count (TVC) sampling on all water tanks, hot water calorifiers. Records are kept with the Estates offices and remedial actions are completed if samples fall outside of control parameters. There is a TVC water sampling strategy covering the entire hospital site over a twelve month period which consists of 120 locations with 30 x TVC samples taken per week.

During December 2016 through to the end of May 2017 monthly Pseudomonas aeruginosa water sampling was carried out in the Neonatal Unit. Out of a total of 60 water samples taken, there were 7 positives isolated in this period.
The Water Safety Group were in agreement that Water Risk Assessments (WRA) will be reviewed every two years and it is compulsory for all new builds to have one. Current Pseudomonas aeruginosa guidance requires a Ps. aeruginosa risk assessment for designated augmented care areas. Hydrop have just carried out Ps. Water Risk Assessments in Critical Care and the Neonatal Unit and the identified actions have been circulated to the responsible personnel.

Several water safety training course have been carried out during the year. These include Legionella general awareness training for estates, DEL and contract staff at Lister hospital in September 2016, ILM Responsible Persons & Deputy Responsible Persons training (3 day refresher) in July 2016, and user evaluation and flushing training in October 2016 which was well attended by G4S and Trust designated staff. A training video on how to flush infrequently used outlets is being developed and will be available for staff shortly.

6. Criterion 3 & 4: Information on infections to service users and their visitors and information on infections to other providers

The Trust continues to use the switchboard as a mechanism for informing the public of infection outbreaks, should they occur. A pre-recorded message is used at the time of outbreaks and is removed once they are over.

Pop up banners are used to inform the public of increased incidence of Norovirus and Influenza.

Infection Prevention and Control (IPC) information leaflets are available on the Trust website for patients and members of the public to access. Printed copies are available for patients identified with infections at ward level.

There is an IPC section on the Trust website which provides information to patients on a number of IPC issues including the numbers of Clostridium *difficile* and MRSA BSI.

7. Criterion 5: Identification and prompt management of infection

The ICD and the consultant microbiologists provide advice on the prompt diagnosis and treatment of infections, including appropriate use of antibiotics. Close working relationships are also in place to facilitate the reporting of infections of public health significance to the local Public Health England (PHE) Unit. In addition, the ICD works closely with PHE in the management of infection-related serious incidents in the hospital. The IPCNs also liaise with their Public Health nursing colleagues in respect of infection control incidents.

Following the transfer of pathology services to Cambridge University Hospitals NHS Foundation Trust in 2015, the identification of relevant pathology results has relied on a manual system which is resource intensive and delays identification of results required by the Infection Prevention and Control Team. During the course of the past year, a feasible IT solution has been identified. However further work between the laboratory providers, the IT providers and Infection Prevention and Control is required to enable a prompt, efficient and reliable service.

8. Criterion 6: Involvement of all staff

The IPCT works closely with all Trust staff to implement good practice and reduce HCAIs. The IPCT is an integral part of Trust induction for all new staff (with presentations on both Infection Prevention and Antimicrobial Stewardship) and mandatory updates on key and emerging issues.

In addition, a number of educational activities have been developed:

- The IPC team has presented information on screen savers displayed on Trust wide computers
- The IPCNs have developed a monthly mail shot to all staff called ‘Quick Picks’ which highlights news and hot topics relating to infection prevention & control.

9. Criterion 7: Isolation facilities

The Trust has around 125 single-occupancy side rooms available across the Trust (some with en-suite facilities). This number varies with the reconfiguration of the wards. It is important to note that in the maternity unit the delivery rooms are all single rooms (with en-suite facilities).

Demand for side rooms exceeds availability. Therefore, patients with infections are risk assessed to enable those with the highest priority to be identified and isolated as required. This has been reflected in the revised Isolation Policy.

10. Criterion 8: Laboratory support

The Microbiology laboratory was re-located to the PHE Microbiology Laboratory at Addenbrooke’s Hospital in Cambridge in 2015. This is part of the Pathology partnership (tPP) process that saw the consolidation of the Pathology Departments of six Trusts in the East of England into two hub laboratories. The Trust has worked together with tPP and PHE and concerted efforts continue towards the advancement of the laboratory services and to improve turnaround times.

11. Criterion 9: Policies

All policies required for compliance with the Health Code are in place. Most IPC policies are written by IPC team members with support from other Trust staff with expertise in the relevant areas. Some policies are written by other teams in the Trust with the relevant experience with the support of the IPC team. These policies are accessible to all staff on the Trusts intranet system.

12. Criterion 10: Health care workers: Infection Status, protection from infection and education in infection prevention & control

In 2016/17 the Health at Work Service (H@W) has continued to work closely with the IPC team. The service has been fully involved in IPC related incidents that affect staff health, such as Norovirus outbreaks, sharps and splash injuries and staff exposure to illness in patients such as chicken pox.

12.1 Sharps/splash incidents

H@W assists the Trust in managing potential exposure to blood borne viruses. Within working hours, H@W risk assess, advise and follow up reported potential blood borne virus exposures. A monthly report is compiled of sharps injuries reported to H@W and/or recorded on the Trusts incident reporting system (Datix), devices involved in sharps injury, staff groups injured and the likely cause of injuries.

Sharps/splash incidents 2016-17	Q1	Q2	Q3	Q4	TOTAL
Staff seen by H@W following a sharps/splash injury	34	38	36	42	150
Staff referred to sexual health services	3	0	1	0	4
Staff commencing PEP	2	0	1	1	4
Staff needing to complete PEP	2	0	0	0	2
Sharps/splash injuries with known positive HIV patients	1	0	1	0	2
Sharps/splash injuries with known positive Hep B patients	0	1	1	0	2
Sharps/splash injuries with known positive Hep C patients	1	0	1	0	2

12.2 Immunisations and blood tests

Health at Work (H@W) screens all new employees to identify specific required workplace immunisations and ensure compliance with Criterion 10 of the Health and Social Care Act 2010. The service continues to work to ensure that existing staff are compliant with immunisations appropriate to their role, in line with Department of Health guidelines.

H@W requests immunisation records from all new employees before they commence work and an assessment of immunisation requirements is made in accordance with Public Health England guidelines. H@W electronically records immunisations in accordance with the Data Protection Act. H@W advises all new employees who require further evidence of immunity to book an immunisation update appointment. Additional blood tests are required for staff undertaking Exposure Prone Procedures (EPP) before these duties are commenced.

H@W recalls staff who require vaccine boosters, reviews immunisation records of existing staff and provides advice to employees on immunisation updates needed, as required.

If employees refuse vaccines or blood tests, fail to attend an appointment or to provide the required evidence of immunity, their manager is informed. Where necessary for patient and employee safety, advice may be given on adjustments to the employee's work.

In addition to routine immunisation programmes, H@W facilitated the annual frontline staff Flu Immunisation Programme.

In the 2016-17 staff influenza vaccine campaign which ended on 31 December 2016, 63.8% (2,927) of frontline staff were vaccinated and a further 600 frontline staff completed a form to decline the vaccine, making a total of 76.8% of frontline staff who engaged with the campaign.

13. Clinical Commissioning Group (CCG) visits

The CCG IPC nursing lead has made a number of regular visits to the Trust throughout the year, working collaboratively with the Trust IPC Team. The Trust participates in a Hertfordshire Infection Prevention and Control Group to coordinate actions, share best practice and devise joint strategies. The CCG IPC Lead is also a member of the Trust Infection Prevention and Control Committee.

14. Conclusion

The Trust has continued to implement a robust plan of IPC in collaboration with a dedicated IPC team and clinical colleagues. This is evidenced by the small numbers of hospital associated infections reported and by the appropriate and effective management of outbreaks. Robust assurance processes are in place.

Key challenges for 2017-18 include:

- Maintaining ongoing high cleaning standards within existing contracts
- Re-establishing an efficient and effective electronic IP&C reporting and management system
- Further reductions in orthopaedic surgical site infection rates
- Extending surgical site infection surveillance to addition categories of surgery
- Effective audit programme designed to facilitate practice improvements
- Introduction of surveillance of bacteraemias in Critical Care
- Introduction of enhanced surveillance of *E.coli* bacteraemias within existing resources
- The increasing prevalence of multi drug resistant gram negative organisms
- Recruitment to expected vacancies in microbiology and the IPC nursing team to maintain a full service
- Achievement of stringent Antimicrobial CQUIN targets for 2017-18