West Hertfordshire Hospitals

NHS Trust

Trust Board Meeting 04 February 2016

Title of the paper:	Infection Prevention and Control update					
Agenda item:	12/34					
Lead Executive:	Tracey Carter, Chief Nurse and	d Director for Infection Prevention and Control				
Author:	Nyarayi Mukombe Assistant Director Infection Pre	evention and Control				
Trust objective:	 Tick as appropriate: Achieving continuous improvement in the quality of patient care that we provide and the delivery of service performance across all areas; Setting out our future clinical strategy through clinical leadership in partnership and with whole system working; Creating a clear and credible long term financial strategy. 					
Purpose:	 The aim of this paper is to update the Board on progress and actions to manage and reduce Healthcare Associated Infections. It reports on: Rates of infections April 2015 to December 2015 Practice and performance issues 					
Link to Board Assurance Framework (BAF)	Principal risk 1. Failure to p	rovide safe, effective, high quality care				
Previously discusse	d:					
Group		Date				
QSG Infection Prevention & Safety & Quality Com		11.01.2016 24.11.2015 26.01.2016				
Benefits to patients and patient safety implications Clean and safe services.						
Recommendations For information and assurance						
The Board is asked to note the report and progress made against the hygiene code.						

West Hertfordshire Hospitals

NHS Trust

Agenda Item: 12/34

Trust Board meeting – 4 February 2016

Infection prevention and control update

Presented by: Tracey Carter, Chief Nurse and Director of Infection Prevention and Control

1.0 PURPOSE

The Trust Board recognises and agrees their collective responsibility for minimising the risks of infection and has agreed the general means by which it prevents and controls these risks. The accountability for infection prevention and control is designated to the Director of Infection Prevention & Control (DIPC). In this trust this individual is also the Chief Nurse.

This 6 monthly update report is one of the means by which the Trust Board assures itself that prevention and control of infection risks are being managed effectively.

The purpose of this report is to inform the Trust Board of the progress made against the 2015/16 Action Plan to reduce healthcare associated infections (HCAI) and sustain improvements in infection prevention and control (IPC) practices for 2015/16. The review of the Annual Action Plan 2015/16 (Appendix 1) shows the progress made towards achieving the IPC objectives over the last nine months (April to December 2015). This work is monitored via the Infection Prevention and Control Panel which reports to the Quality and Safety Group (QSG). Infection control indicators are also monitored monthly via the integrated performance report (IPR) and reported to Trust Board.

2.0 BACKGROUND

The Action Plan for 2015/16 focuses on The Health and Social Care Act 2008, updated 2015. (Code of Practice on the prevention and control of infections) This is also known as The Hygiene Code, which identifies criteria to ensure that patients are cared for in a clean environment, which minimises the risk of acquiring a HCAI.

3.0 INFECTION PREVENTION AND CONTROL ARRANGEMENTS

A comprehensive infection prevention and control service is provided Trust-wide. The Infection Prevention & Control Team (IPCT) provides a ward liaison and telephone consultation service with on-call arrangements. This on call is undertaken by a consultant microbiologist for emergency assistance and advice.

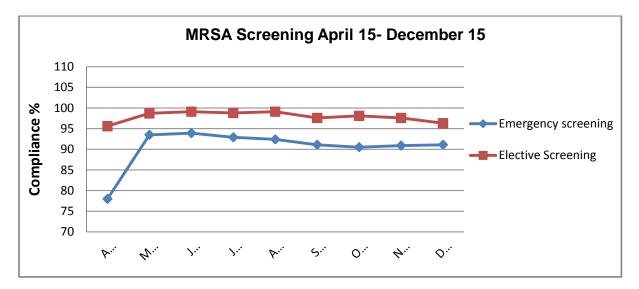
4.0 MANDATORY SURVEILLANCE REPORTING OF HEALTHCARE ASSOCIATED INFECTIONS (HCAI)

There is no dedicated electronic Infection Control (IC) surveillance software. With the IPCT using a paper system which is time consuming. The IPCT are working with CGI to progress the requirements with the aim to build and match with other IC Surveillance software.

4.1 MRSA SCREENING COMPLIANCE:

In June 2014 the Department of Health (DH) published the implementation of modified admission MRSA screening guidance for NHS trusts, where trusts could implement selective screening for MRSA. It was agreed at the IPCP meeting that the Trust will continue to adopt MRSA screening for all planned and emergency admissions. The MRSA screening compliance is monitored in the bi monthly IPCP meetings. Patients identified to be MRSA positive are promptly isolated and commenced on the decolonisation protocol.

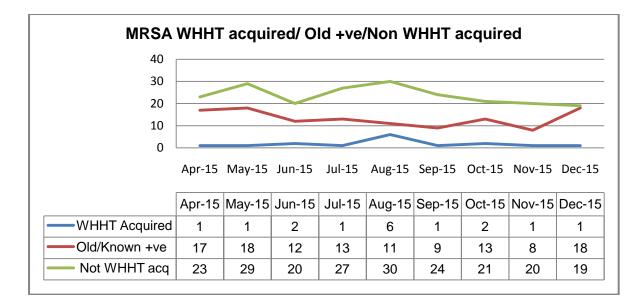
Below is the graph that shows MRSA screening compliance for both emergency and elective admission in the trust from April 15 to December 2015.



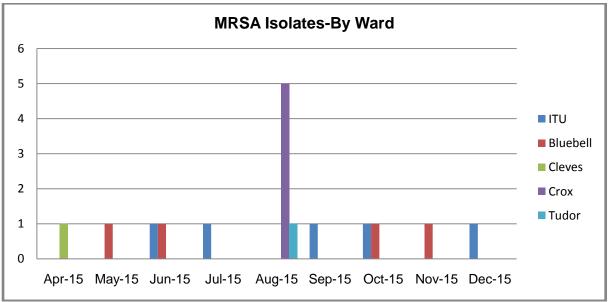
The graph shows that there was a dip in the trust wide Emergency MRSA screening compliance. The IPCNs have continued to support the wards with education and training to ensure that compliance improves.

4.2 MRSA ISOLATES FOR APRIL 2015 TO DECEMBER 2015

The graph below shows that the West Hertfordshire Hospitals NHS Trust (WHHT) monthly acquired MRSA figures is less than those who are previously positive.



MRSA ISOLATES PER WARD:



The graph demonstrates 5 cases of MRSA on Croxley ward. This was due to an MRSA (colonisation) outbreak on Croxley ward. This will be discussed later in the paper in the section of outbreak and incidents.

4.3 MRSA BACTERAEMIA:

The DH began mandatory surveillance of MRSA bacteraemia in April 2004. The trajectory set for this financial year 2015/2016 is zero tolerance on MRSA bacteraemia. For all cases of MRSA bacteraemia a Post Infection Review (PIR) is carried out. All organisations involved in the patient `s care pathway are expected to participate jointly at the PIR and jointly agree the possible cause or factors that contributed to the patient`s MRSA bacteraemia. The purpose of the PIR is to identify how a case of MRSA bloodstream infection occurred and to identify actions that will prevent it reoccurring. The outcome of the PIR will be to determine clinical learning and attribute responsibility for MRSA bacteraemia.

In Q1 and Q2 the trust has no MRSA bacteraemia reported that has been apportioned to the Trust.

In October 2015, there was an MRSA bacteraemia on AAU. The PIR was attended by the representatives from all the organisations involved in the patient `s care pathway that was the patient`s General Practitioner (GP), Herts Valley Clinical Commission Group (Head of IPC), IPCT and the clinical teams looking after the patient.

Prior to the MRSA bacteraemia in October 2015, the last MRSA bacteraemia had been in May 2015.

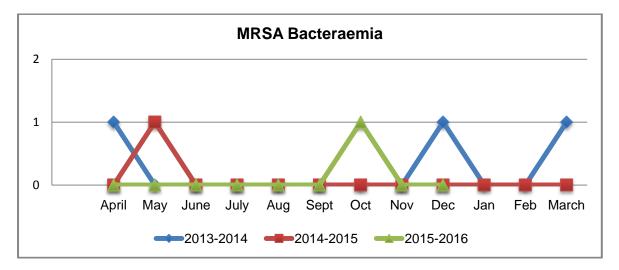
Issues/learning identified;

- Improvement in documentation; wound management and visual infusion phlebitis (VIP) scores
- Education and training for nurses and doctors on the technique for collecting blood cultures
- Improve IPC training compliance to 95%
- Leg dressings not taken down in A and E on admission.

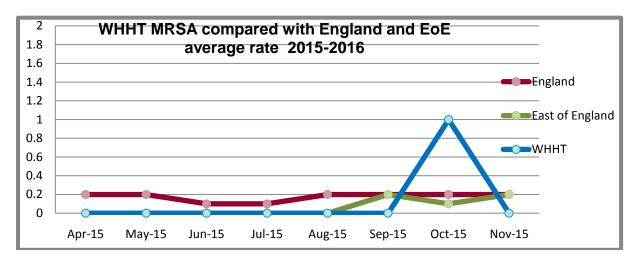
Following this IPCNs have also focussed training on documentation, and MRSA management. A vascular access nurse will be starting in February 2016 who will support the management of vascular access devices.

The learning from the PIR has also been discussed at the Unscheduled Care divisional Governance meeting in November 2015 and also the Joint Medicine and Unscheduled Care governance meeting in January 2016.

Below is the comparison of the MRSA bacteraemia from April 2012 to December 2015



Comparisons between WHHT`s MRSA bacteraemia rate per 100,000 population with East of England (EoE) & National



Regional and national PHE Data only available up to November at present

The MRSA figures have reduced significantly nationally; this is also reflected in this graph. WHHT has in Q1 and Q2 remained below the national and EoE average. At time of writing this report the PHE had of published the national and east of England figures for December 2015.

4.4 CLOSTRIDIUM DIFFICILE INFECTION (CDI) PERFORMANCE

Reporting for CDI in patients aged 65 and over has been mandatory since 2004 and in 2007 this was extended to include all episodes in patients aged 2 years and over.

The trust trajectory for this financial year is 23. Our monthly trajectory for CDI is higher at the end of the financial year than it is at the beginning; this has meant that throughout the year we are over trajectory on our monthly figures. To date 23 WHHT apportioned *C.difficile* has been reported.

4.5 ROOT CAUSE ANALYSIS (RCA):

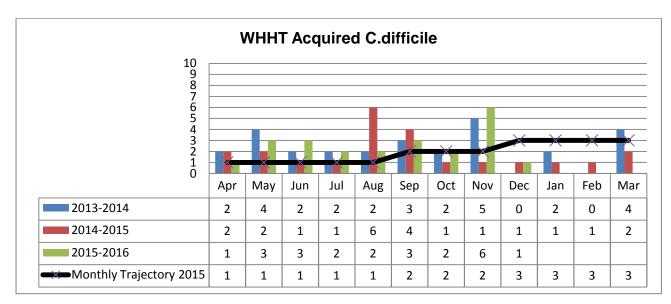
All post day 3 cases of *C difficile* infection (WHHT apportioned CDI cases) are investigated using the RCA process. The expectation is that the RCAs are completed within 14 working days of the notification. Currently this is not always being achieved in the divisions due to various clinical commitments.

The RCA are robust, they involve the IPCT (IPC nurse and or Assistant Director of IPC and consultant microbiologist or Infection Control Doctor and antimicrobial pharmacist; Clinical team looking after the patient; Consultant, Head of Nursing or matron and ward manager and the Head of IPC Herts Valley CCG.

The responsibility for completion of the RCA rests with the relevant division and must be completed collectively by the relevant teams. The RCA is discussed and an action plan created. Each RCA, including the associated action plan was presented and monitored at the bi weekly LHCAI meetings, however since July these are being discussed at the Divisional Governance meetings, facilitating the sharing and learning across the organisation. As from July the IPCT have been attending the Divisional Clinical Governance meeting. IPC is a standing item on the agenda of these meetings. This is where the progress of the action plan from the RCA will be monitored and progressed.

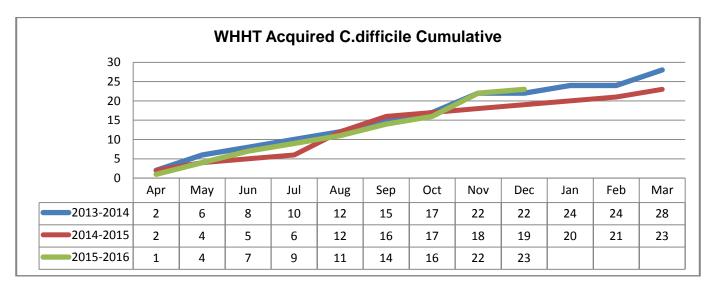
Below is the *Clostridium difficile* graph comparing the last 3 financial years April 2013 to December 2015. This demonstrates that there has been some reduction, especially comparing August and September last year (2014) where we reported 10 cases compared to 5 this year for the same months.

However in November 2015 we reported six cases of *Clostridium difficile*, as demonstrated in the graph below all the cases were on different wards and also had different ribotypes, therefore there was no link in the cases.



WHHT ATTRIBUTED *C.DIFFICILE* CASES FROM APRIL 2012 TO DECEMBER 2015

COMPARISON OF WHHT ATTRIBUTED *CLOSTRIDIUM DIFFICILE*; APRIL 2013 TO DECEMBER 2015

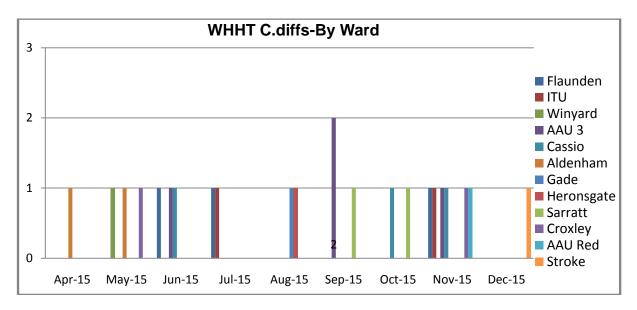


Following the increased incidents of CDI cases in May and June, a CDI reduction action plan was produced. See Appendix 2 for the action plan and update. The IPCN have also been undertaking targeted training (Power Training) on wards where there has been a case of CDI. These sessions cover management of a patient with diarrhoea/CDI, Isolation, documentation, decontamination, stool sampling and hand hygiene. For staffs that work only on weekends and nights, a training pack is available on the ward, the staff are expected to sign that they have read and understood the pack. An attendance register is kept for all staff that has received training, through the face to face session and the rest to have read the pack.

The thematic review of the CDI cases, has also informed the IPCT on areas to focus on with regards to raising awareness. None of the cases in Q1 were submitted for exclusion from our trajectory, as there were some elements of lapses in care, the uptake of IPC training, hand hygiene compliance and the decontamination of medical equipment. See appendix 3 for the criteria for lapses of care. The Q1 thematic review has been shared across the Surgery and Medicine division in their divisional governance meetings.

A weekly *C-difficile* ward rounds which includes a consultant microbiologist, IPCN and antimicrobial pharmacist was implemented in September 2015. The IPCT keep a timeline of the entire *C.difficile toxin* positive tested in our laboratory. All isolates are also sent for ribotyping. To date there has not been any link of the cases in relation to time, place and ribotyping. The 2 CDI cases reported on AAU3 for September have different ribotypes; therefore have no links to each other.

Clostridium difficile infection per ward:



The 2 CDI cases reported on AAU3 for September have different ribotypes; therefore have no links to each other.

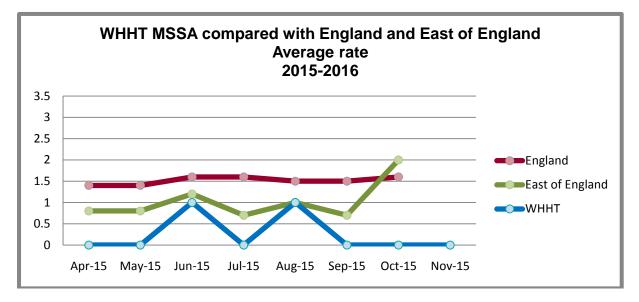
4.6 METHICILLIN SENSITIVE *STAPHYLOCOCCUS AUREUS* BACTERAEMIA (MSSA BACTERAEMIA)

Reporting of MSSA bacteraemia has been Mandatory since January 2011. There is no trajectory set for MSSA. To date there has been 2 cases of MSSA bacteraemia both in Q1 and Q2, none in Q3.

MSSA	Q	Quarter 1		Quarter 2		Quarter 3			Quarter 4			
	April	Мау	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
2013/2014	1	1	1	0	0	2	0	0	1	1	0	0
2014/2015	1	0	0	2	0	2	2	0	2	0	3	0
2015/2016	0	0	1	0	1	0	0	0	0			

Below is a table with comparison between 2013/2014 and 2014/15 and 2015/16

COMPARISONS BETWEEN WHHT`S MSSA BACTERAEMIA RATE PER 100,000 POPULATION WITH EAST OF ENGLAND (EoE) & NATIONAL



Regional and national PHE Data only available up to November for WHHT.

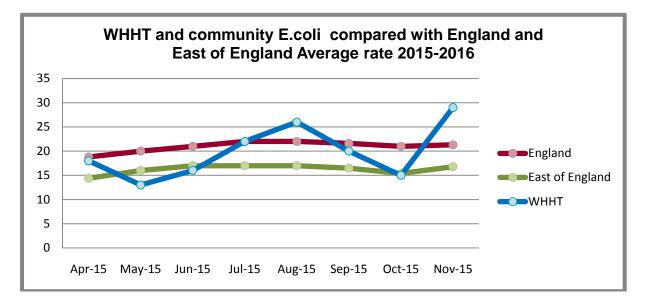
- Year to date demonstrates that we have reported less WHHT apportioned MSSA bacteraemia than the previous year's 2013/14 and 2014/15.
- WHHT apportioned cases compared national and regional we are below both national and EoE rates

4.7 ESCHERICHIA COLI (E.COLI BACTERAEMIA):

Reporting of **E.coli bacteraemia** has been Mandatory since June 2011. There is no trajectory set for E.coli bacteraemia.

E.coli	Quarter 1		Quarter 2		Quarter 3			Quarter 4				
	April	Мау	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
2013/2014	0	1	2	5	4	7	2	1	2	2	6	2
2014/2015	1	2	3	2	4	2	3	0	3	1	1	3
2015/2016	3	3	2	3	2	1	2	2	5			

Below is a table with comparison between 2013/2014 and 2014/15 and 2015/16 for E.coli



Regional and national PHE data only available up to November at present

- WHHT apportioned cases compared national and regional are below both national and EoE rates in Q1, though we were above national and EoE average for August 2015 and dropping in September 2015.
- The IPCT report all cases of E.coli to the clinicians, patients are isolated in a side room.
- IPCN send all the E.coli patients details to the Continence Clinical Nurse specialist who will follow up all patients with urinary catheters to ensure appropriate management of the device

5.0 SURGICAL SITE INFECTION SURVEILLANCE PROGRAMME

APRIL 2015 TO SEPTEMBER 2015

Orthopaedic Surgical Site Infection (SSI) surveillance is a mandatory requirement introduced by the Department of Health in April 2004. The mandate requires all NHS trusts undertaking orthopaedic surgical procedures to carry out a minimum of three months' SSI surveillance for each financial year in at least one of four categories (hip prosthesis, knee prosthesis, repair of neck of femur or reduction of long bone fracture). WHHT has been participating in continuous hip and knee prosthesis SSI surveillance since July 2010 with the addition of other categories of surgery as agreed within the Divisional SSI Surveillance Programme.

Public Health England's (PHE) healthcare associated infection and antimicrobial resistance department (HCAI & AMR) facilitate the surgical site infection surveillance service (SSISS). The data is collated locally and then forwarded to PHE for validation, analysis and dissemination of results. Orthopaedic data from participating hospitals are aggregated to trust level for public reporting purposes. The NHS Trust Tables and Surveillance of Surgical Site Infections in NHS Hospitals in England Report for the previous year are published annually.

5.1 SSISS QUARTER 2 (APRIL TO JUNE 2015)

Surveillance Period	Category of Surgical Procedure	Final Data Reconciliation Date	Reconciliation achieved Y/N	SSIPN Support
April to June	1/ Hip replacement	30 th September	Yes	1/ IPCT
2015	2/ Knee	2015		2/ Orthopaedic SSI Lead
	replacement			Surgeon

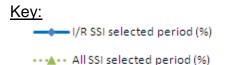
a) WHHT SSI Surveillance Programme:

b) SSI Prevention Panel (SSIPP) data analysis report:

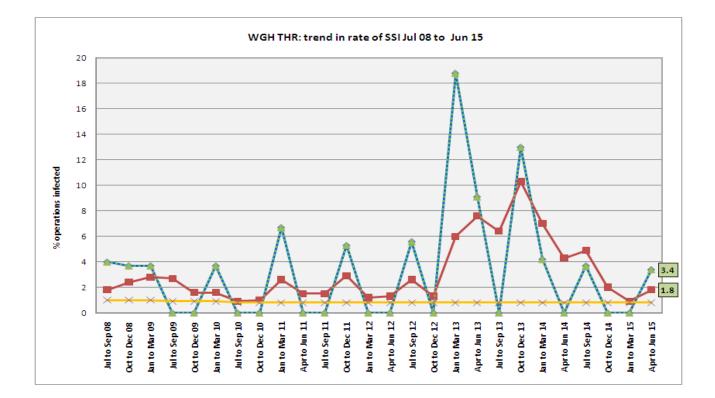
Saint Albans City Hospital (SACH): the SACH Total Hip replacement **(THR)** and Total Knee replacement **(TKR)** SSISS results have been presenting below the national baseline since July 2014 and are not currently a cause for concern.

Watford General Hospital (WGH): following a thirty three month period of zero reportable SSIs in **TKR** at WGH, 1 x SSI for Jan/Mar 15 in a combined (last 4 periods) study population of 84 operations elevated the trend in rate of infection to 1.2% against a national baseline of 0.7% (inpatient/readmission + without patient questionnaire). Nil SSIs were reported for **Apr/Jun 15** therefore the rate declined to 1%. The Division continues to monitor the situation closely.

WHHT received PHE SSISS three separate high outlier notices for THR in Jul/Sep 14, Oct/Dec 14 and Apr/Jun 15 (incidence of SSI [inpatient and readmission] above the national 90th percentile in the previous four periods combined). The SSIPP, which has been actively reviewing trends in SSI rate since 2008, concluded that there was a known clinically significant rise in SSI incidence at WGH commencing Jan/Dec 13. The actual number of SSIs in a relatively small study population increased the rate of infection to a peak of 10.3% in Oct/Dec 13 however PHE high outlier notices were not received at the time due to number volumes being less than the 100 threshold for 4 combined periods. A subsequent rise in study population numbers resulted in the first high outlier notice for Jul/Sep 14. It was felt during this time that, although the actual numbers were on the decline, the trend in SSI rate continued to be affected by the Oct/Dec 13 surveillance period results. The downward trend continued to 0.9% in Jan/Mar 15 which was noted by the SSIPP as the lowest rate of SSI since Oct/Dec 12 (1.3%). 1 x SSI for Apr/Jun 15 in a combined study population of 110 operations elevated the rate of infection to 1.8% against a national baseline of 0.8% (inpatient/readmission + without patient questionnaire). The Division continues to monitor the situation closely (please see graph below).



I/R SSI last 4 periods (comparable - %)
National % SSI all hospitals I/R no PQ (last 5 years)



c) SSIPP completed action points April to June 2015:

- Amendment agreed to joint replacement and fractured neck of femur antibiotic prophylaxis policy at WGH. SACH antibiotic prophylaxis policy unaltered.
- Orthopaedic Microbiology MDT poster presented at the EFFORT congress on 27th May 2015.

5.2 SSISS Quarter 3 (July to September 2015)

Surveillance Period	Category of Surgical Procedure	Final Data Reconciliation Date	Reconciliation achieved Y/N	SSIPN Support
July to	1/ Hip	31 st December	Validating	1/ IPCT
September 2015	replacement	2015	period October	2/ Orthopaedic SSI Lead
	2/ Knee		to December	Surgeon
	replacement		2015	3/ Colorectal SSI Lead
	3/ Large bowel			Surgeon
	surgery			4/ Gastrointestinal
				Enhanced Recovery
				Nurse

d) WHHT SSI Surveillance Programme:

e) SSI Prevention Panel (SSIPP) data analysis report: data validation in progess at time of this report. Results to be presented to the SSIPP on 2nd February 2016.

Preliminary findings SACH: THR and **TKR** SSISS results unchanged. Currently no cause for concern.

Preliminary findings WGH: decline in combined trend in rate of infection for **THR** to 0.8% against an amended national baseline of 0.7% (inpatient/readmission + without patient questionnaire). Rise in combined trend in rate of infection for **TKR** from **1% to 1.9%** against an amended national baseline of 0.6% (inpatient/readmission + without patient questionnaire). Clinical significance to be discussed at the SSIPP in February 2016.

Large Bowel Surgery: data collated and validated. Awaiting final report from PHE.

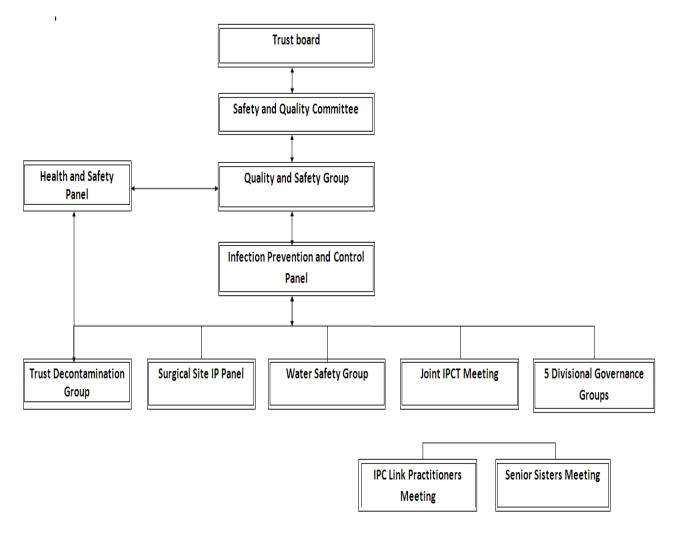
f) SSIPP completed action points for July to September 2015:

- Agreement for SSIPP Chairman to escalate and provide assurance on WGH
 – SSISS high outlier THR Q4 Oct to Dec 2014 and Repair of Neck of
 Femur surveillance to Divisional Governance and Quality Group and Infection
 Prevention and Control Panel. Action completed September 2015.
- Obs and Gynae request to attend SSIPP and be part of the SSISS process for total abdominal hysterectomy.

6.0 SYSTEMS TO MANAGE AND MONITOR THE PREVENTION AND CONTROL OF INFECTION

The following explains the systems and processes that are in place in the Trust IPC:

BELOW IS THE IPC REPORTING ARRANGEMENTS.



6.1 INFECTION PREVENTION AND CONTROL PANEL (IPCP)

Prior to August 2015 the group met monthly, it now meets bi-monthly and the meeting is chaired by the DIPC. A patient representative and the Head of IPC Herts Valley CCG are members of the IPCP. The IPCP reports to the Quality and Safety Group (QSG) and Patient Safety Quality and Risk Committee (PSQR).

6.2 WATER SAFETY GROUP (WSG) MEETING:

The water supply to a hospital can be a source of infection for patients and staff. Legionella is a recognised risk, and much effort is directed to maintaining the water supply to minimise the risk. However other organisms may also be harboured in the water system which can be a threat to patients, for example pseudomonas aeruginosa. The DH issued an Addendum to the current HTM 04-01 – Pseudomonas aeruginosa – advice for augmented care units, in March 2013.

The aim of the group is to ensure that risks associated with water systems are recognised, documented and action taken to minimise or control these risks and to ensure that the Trust is compliant with the Health and Social Care Act 2008 (2015) and DH legislation and guidance as they pertain to the safety of hot and cold water systems in Trust premises, with specific reference to:

- Control of legionella
- Control of pseudomonas and other waterborne pathogens

The group meets monthly and the minutes of the meeting are tabled at the IPCP meetings. Any issues from the meeting are escalated to the QSG via the IPCP meetings. The WSG meeting is chaired by the DIPC. There is also an External appointed independent water safety consultant who supports and advises the group.

The Trust Development Authority (TDA) Head of IPC has been on site the previous months and was informed of a number of repeat water sampling failures in PMOK Level 2. An update on the failures now showed negative results following a program of remedial works, of all affected outlets.

6.3 PSEUDOMONAS AERUGINOSA (P. AERUGINOSA)

There had been long running P. Aeruginosa issues on the SCBU which had been managed via POU filters. Currently all outlets in clinical areas are now returning negative results for P. Aeruginosa.

6.4 CONTROL OF LEGIONELLA

Legionella had been identified in a number of outlets – these were being managed in the short term through fitting of point of use (POU) filters, flushing and a program of cleaning & chlorination

There were 2 clinical cases of legionella reported, however these were community cases. The cases have been discussed at the water safety group meetings (WSG). The recently published Public Health England (PHE) guidance on Responding to the detection of legionella in healthcare premises (PHE 2015) has been discussed and reviewed at the WSG and IPCP meetings.

Actions Taken Following Failures:

There is daily flushing and point of use (POU) filters were in place on affected outlets, also on receipt of high counts disinfection and chlorination is undertaken, with re sampling done 48hours post chlorination and disinfection of the affected out lets.

6.5 WET SERVICES SYSTEMS

Wet services refers to the infrastructure associated with providing hot, cold, treated and drinking water, that is pipe work, tanks, pumps, taps, valves, water softeners, treatment units.

The wet services systems throughout the Trust, is a broad mix of building stock from 1900's builds, to modern construction, and the difficulties associated with the management of Water Safety within the Trust

6.6 WORKS FOR SCBU TO REPLACE WET SERVICES:

A Capital scheme was in progress to replace all wet services on the Unit. Planning the works had taken considerable time; this was as a result of the lack of appropriate services drawings.

The work on SCBU was completed on the 5th December 2015; a deep clean was carried out. The patients moved back in the unit following the IPC checks on the 6th December 2015.

Water sampling following the works was undertaken and all results for legionella have come back clear.

TDA head of IPC has visited the unit on the 17th December 2015 and acknowledged the work that has been done.

6.7 SAMPLING REGIME,

The Trust currently undertakes 3 monthly water sampling for legionella and pseudomonas in both Intensive Care Unit and SCBU. The results are monitored via the water safety group.

6.8 **RISK REGISTER**:

Water safety risk is on the corporate risk register and is one of the highest risks. This is risk number 2883. It has a risk score of 15.

7.0 DIVISIONAL GOVERNANCE MEETINGS:

The IPCT attends the monthly divisional governance meetings, a report for the division is presented by the IPCT with the Mandatory surveillance, IPC training compliance, results of various audits, RCAs and any clinical issues are discussed.

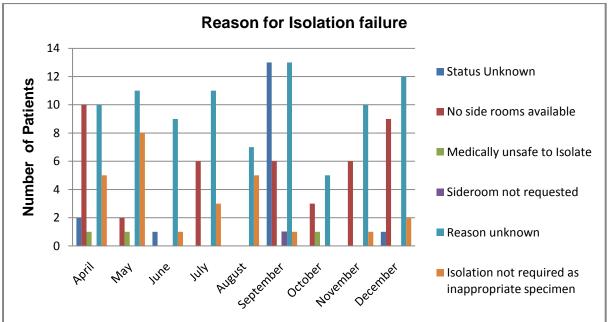
7.1 THE INFECTION PREVENTION AND CONTROL 'DASHBOARD'

This is presented at the Infection Prevention and Control Panel (IPCP) meeting each month. "Red Exception reports" are produced by the division/departments where areas of non-compliance are identified and discussed at the Infection Prevention and

Control Panel monthly meeting. The dashboard has Hand hygiene compliance, Commode audits, IPC training compliance, MRSA screening compliance, ward cleaning scores and high impact intervention audits. The actions taken will be explained below under each key performance indicator.

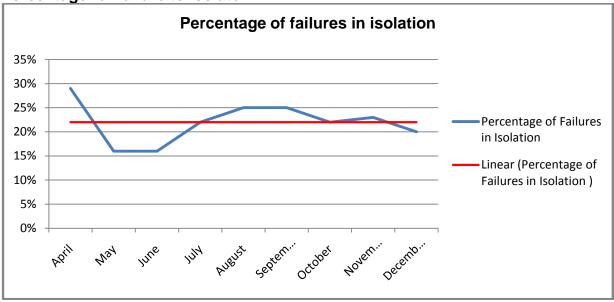
8.0 FAILURE TO ISOLATE:

There are challenges with the availability of side room due to the availability within the Trust and competing priorities. Failure to isolate within 2 hours is recorded on Datix as an incident and discussed at the bi monthly IPCP. There is no side room availability in the Granger Suite; this is on the risk register. Risk Patients that need isolation in a side room are transferred either to the isolation unit or to another ward where a side room is available. Out of hours and weekends there is a senior nurse to support ward staff in prioritising the side rooms, during the week IPCNs support this. The 2 graphs below show the reasons for isolation failure and the percentage for failure to isolate



Reasons for Isolation failure:





- IPCNs continue to support clinical areas that have patients that have not been isolated due to unavailability of side rooms by ensuring appropriate management of these patients.
- Regular visits by IPCNs to clinical areas

9.0 ENVIRONMENTAL CLEANLINESS MONITORING:

In 2013 WHHT adopted BSI Standard - PAS 5748:2011 as the criteria for assessing cleaning standards across its 3 hospital sites. PAS 5748:2011 is a Publicly Available Specification (PAS) sponsored by the DH and National Patient Safety Agency (NPSA) and provides a 'Specification for the planning, application and measurement of cleanliness services in hospitals'.

A phased implementation plan for PAS 5748:2011 stated in late 2013 and was completed in all areas across all sites by February 2015. The implementation was overseen by the Trust Facilities team, who coordinated the input from clinical and non-clinical teams, Medirest and the DIPC. The standards to be achieved in each area were agreed and signed off by a senior clinical representative (at matron/senior sister level).

PAS 5748:2011 is a risk-based system whose adoption is designed to provide evidence of a Trust's intent to comply with the CQCs requirements for cleanliness and infection control. The PAS is not prescriptive, but is based on local determination of the level of service provision required, supported by an auditing programme to measure the standard of cleanliness achieved. The audit is based on 50 scored elements that provide a representative sample from which level of risk can be assessed.

The current Trust Cleaning Policy does not reflect the adoption of PAS 5748:2011. The policy is being reviewed by the Facilities team and will be submitted to the IPCP in January 2016.

Monitoring.

Cleaning standards at WHHT are subject to formal and informal monitoring as outlined below:

Formal Monitoring.

- By Medirest Quality Assurance Team. Medirest is bound within the contract to provide internal quality assurance based on the agreed cleaning standards adopted by the Trust. Under PAS 5748:2011 technical assurance audits are undertaken weekly in all High risk areas, monthly in all Medium risk areas and quarterly / half-yearly in Low risk areas. These audits are completed by the Medirest site management teams and are discussed at the monthly performance review meetings. From November 2015 these audits were undertaken on a tablet-based system, but the results are not published. Medirest also undertake an annual 'external' company audit of performance against cleaning standards. The results of this audit are presented to the Trust.
- By Trust Contract Monitoring Team. The Trust monitoring team conduct monthly audits of all functional areas identified in the SLA. These audits are conducted in accordance with the the guidelines laid down in PAS 5748:2011, and result in a PASS / FAIL score for each area. Results are presented at the monthly performance review, circulated to Trust's senior nursing managers (including all those with lead responsibility for a functional area), and presented at the bi-monthly IPCP.

Informal Monitoring.

- Mock CQC Inspections. The Trust has a programme of 'improvement' inspections based on the mock-CQC inspection format. These visits assess, amongst other things, cleaning standards, reporting back to Execs, Dir Gov and Director of Environment.
- 15 Steps / Exec Visits. A less formal programme of Exec-led visits includes 'cleaning standards' amongst the issues considered. Results reported back through Execs, as above.
- **Other.** Monthly mock-PLACE visits are undertaken jointly by members of the Facilities team and the Patients Panel. The visit focuses on the 5

PLACE domains, including cleaning. A rolling PLACE action plan including issues identified on these visits is maintained and managed by Facilities.

9.1 DEEP CLEAN PROGRAMME:

The Trust Cleaning Policy states that deep clean will be conducted throughout inpatient clinical areas on a rolling 3 month programme. Where possible the Sterinis disinfection process should be undertaken concurrent with the deep clean. The deep clean programme is owned by Facilities. Clinical areas should make every effort to make their areas available in accordance with the programme, where this not possible alternative dates within the 3 month window should be agreed. The policy states that Medirest should provide at least 2 days notice of their intention to deep clean an area.

Since the Policy was written operational pressures in the Trust has meant the programme has been conducted on a bay-by-bay, room-by-room basis; and rarely with the opportunity to use the Sterinis machine except in side rooms. As a result, as of mid November 2015 almost 30% of clinical areas are overdue a deep clean by at least one month, with almost 10% overdue by 3 months. The Sterinis machine has only been used on about 30% of the areas in the last 12 months.

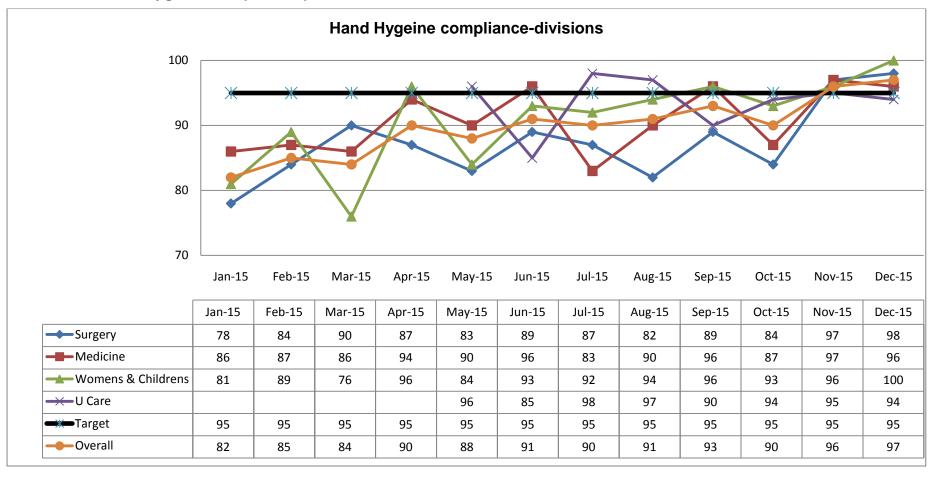
As the Trust moves into winter, Facilities will take ownership of the deep clean programme, developing a plan to ensure all areas have been deep cleaned within a 3 month period ending on 28 February 2016. Clinical support is essential to delivery of the programme. The IPCP have been briefed by the Facilities team, with a paper to be brought to the next IPCP in January 2016 and thereafter to be taken to the Quality & Safety Group. The associated Risk will be included on the Risk Register.

10.0 HAND HYGIENE AUDITS COMPLIANCE:

All inpatient and outpatient clinical areas are required to undertake Monthly hand hygiene audits. Compliance rates are fed back direct to the clinical leaders. The trust Hand hygiene compliance target is 95%. Compliance with hand hygiene is monitored in the bimonthly IPCP meetings, through the IPC dashboard.

All auditors are trained in undertaking the hand hygiene audits to ensure that there are no variations. The Trust continues to participate in the yearly WHO international hand hygiene awareness day on the 5th of May with different activities undertaken by the IPCNs involving staff and members of the public.

Below is the hand hygiene compliance per division



11.0 INCIDENTS AND OUTBREAKS OF INFECTION

Outbreaks of infection continue to be the major cause of infection related incidents in any hospital in the United Kingdom. Outbreaks occur when there are two or more linked infections which may or may not be preventable. These events are recognised through surveillance, reporting or routine IPCT activities and are by definition unpredictable.

11.1 MRSA (COLONISATION) OUTBREAK: CROXLEY WARD

There were 5 MRSA positive patients indentified, all of which had been negative on admission. The index case was a previous MRSA positive patient from a GP sample. The patient was isolated on admission in AAU but not isolated on transfer to Croxley ward. The patient was high risk as he suffered from Eczema. Outbreak meetings were convened and Head of IPC in Herts Valley CCG was also involved. The whole ward was screened for MRSA. No further cases MRSA were identified. The IPCN have continued to maintain high visibility on Croxley ward, undertaking some support audits and providing some education and training.

The Public Health England (PHE) reference laboratory typing confirmed that EMRSA-15 was isolated from all the five patients, four in a male bay and one in a female bay. There is evidence that there was some transmission.

This outbreak has been reported on Datix and was investigated internally. The learning from the outbreak has been shared in all the divisional governance meetings and final report be presented to the IPCP.

Key learning were:

- Failure to isolate a previous MRSA positive patient who was considered high risk, as the patient also suffered from eczema which would cause the skin to shed in the environment therefore leading to transmission.
- Delay in decolonisation protocol for an MRSA positive patient

Following this a substantive matron and ward manger were appointed to support the ward. The IPCNs also have continued to maintain high visibility on the ward. There has not been any further transmission on Croxley ward.

11.2 CARBAPENEMASE-PRODUCING ENTEROBACTERIACEAE (CPE)

Carbapenems (such as Meropenem) are a powerful group of broad-spectrum antibiotics which are often the last effective defence against multi-resistant bacteria. Infections with Carbapenem-resistant enterobacteria are an emerging threat. It is seen mainly in the Indian subcontinent but has also been reported in the Mid-East, North Africa, Europe and the USA. In this country, less than 100 cases have been identified by the Health Protection Agency (now PHE) with bacteria that are Carbapenem-resistant. Many have been associated with patients who have received prior treatment abroad, in India or Pakistan, but there are reports of a few incidents of cross infection in the UK. In December 2013, PHE issued the "Acute trust toolkit for the early detection, management and control of Carbapenemase-Producing Enterobacteriaceae (CPE). The toolkit requires that the Trust should have a dedicated pre prepared plan to prevent the spread of CPE. The Trust has a CPE policy in place.

Since April 2015 to September 2015 there have been three positive CPE cases identified.

July:

- A CPE positive case was identified in one of the London Hospital on transferred from Heronsgate ward/AAU.
- 23 contacts were identified.
- 'Alert' put in place on Clinicom/PAS.
- Screening was undertaken for those who were still inpatients.

August:

- Patient on AAU 1 purple was found to be CPE positive.
- 5 contacts identified of which 3 remained inpatients and were followed up,
- Alert' put in place on Clinicom/PASfor the discharged patients.

September:

- One patient on Aldenham ward was found to be positive for CPE
- 11 contact patients were identified. All have had CPE 'alert's put on Clinicom/PAS.
- Of the 11 contact patients, 1 remained an inpatient on Aldenham ward. The patient was screened for CPE. The patient has since been discharged.
- 2 of the 11 contacts had been transferred to other health care institutions, the IPCT of these institutions were informed about the patients being contacts of a CPE positive patient.

Our policy stipulates that all patients that have been an inpatient in a hospital abroad, any London hospital and Manchester within the last year need to be isolated and screened for CPE on admission. This is monitored via the IPC dashboard at the bi- monthly IPCP meetings. A patient Risk assessment document was launched in June 2015, this helps to support staff to identify patients that need screening for CPE on admission.

11.3 TUBERCULOSIS (TB

There were 2 unrelated Tuberculosis incidents on the Watford site.

Incident 1:

Index patient had a lymph node aspirate done end of May 2015, which was reported AAFB positive on culture on 3rd July 2015. Subsequent sputum samples were reported AAFB positive and confirmed as Mycobacterium tuberculosis (MTB).

The patient was an inpatient on Acute Admissions Unit (AAU) and Aldenham ward. They were nursed in a bay with other patients; from 11th June to 16th June 2015. They were discharged home from WGH on 16/06/15 but continued to receive intravenous drug therapy under the care of WGH. This patient was readmitted to WGH from 28/06/15 to AAU and transferred to Aldenham Ward on 03/07/15 where they remained in isolation until discharge on 25/07/15.

Contact tracing

On 12th August 2015, the Lead Respiratory consultant wrote a letter to the patients and their GP's explaining the incident.

Contact tracing was undertaken relating to this patients hospital stay in June 2015 where they were nursed in open bays in Aldenham and AAU. This exercise identified 10 patient contacts. The screening of these ten contacts was co-ordinated and managed by the Respiratory team.

Incident 2;

A bronchoscopy procedure was undertaken as a day case at WGH Endoscopy Unit on 15/06/15. On 18/06/15 bronchial alveolar lavage washings, taken on 15/06/15, were reported direct smear positive for AAFB and identified as Mycobacterium tuberculosis (MTB). The respiratory physician who performed the procedure highlighted their concern as 'masks' were not worn during the bronchoscopy procedure.

The members of staff who were in attendance at the bronchoscopy procedure for the patient were identified and referred by occupational health department at WGH to the TB nursing service for follow up. All screening was negative for MTB.

Actions taken following both incidents include:

- More regular liaison between the Respiratory Nurse CNS and members of the IPCT
- Sharing of relevant information & notification of possible/probable cases of TB as identified by the IPCN's on routine ward visits to Respiratory Nurse CNS.
- Antimicrobial pharmacist notifying the IPCT of patients who have been commenced on medications used for TB treatment. This will trigger further review/follow up by the appropriate teams.
- Early review of the organisations Management of TB Policy, in cooperating the NICE TB guidelines
- Wearing of mask when undertaking bronchoscopy this will also be reflected in the revised TB policy
- A follow up meeting with PHE has been arranged for November 2015
- Completion of the RCA following these incident
- TB specialist nurse is doing TB screening from September for staff.

12.0 ANTIMICROBIAL STEWARDSHIP ACTIVITIES

An antimicrobial stewardship programme is a key component in the reduction of healthcare associated infections (HCAI) and contributes to slowing the development of antimicrobial resistance. A Start Smart-then Focus approach is recommended for all antibiotic prescriptions in secondary care.

WHHT antimicrobial strategy document has an antimicrobial stewardship audit plan for each year. This includes monthly antibiotic report, monthly antimicrobial stewardship care bundles and annual point prevalence survey of antimicrobials.

The 2015 Point Prevalence Survey data was collected on 11-13th November 2015. The objective of the survey was to collect data on antimicrobial use on all wards across the Trust. This survey is part of the antimicrobial stewardship programme.

The percentage of patients prescribed antimicrobials is 33% (200 patients). This is lower than November 14 survey (40%).

The percentage of IV antimicrobial courses is 60% (173/286). This is lower than November 14 survey. 63% of patients prescribed antimicrobials were over 65 years old.

56% (n=112) of patients were prescribed antimicrobials in the medicine division (31% in COE and 25% in medicine)

Indication documentation on drug chart has decreased since Nov 2014 survey (56% to 43%) and stop/review documentation has also decreased since Nov 2014 survey (50% to 43%). 49% of PPI courses for patients on antimicrobials were reviewed (switched/stopped or withheld).

Overall compliance to antimicrobial guidelines is 83% which is similar to November 2014 survey (89%). Compliance to guidelines was 76% for Medicine Division mainly due to inappropriate prescribing for Community Acquired Pneumonia.

50 antimicrobial courses were for CAP. Only 14% had CURB-65 score documented and only 56% of prescribing was as per guidelines for CAP.

70% of antimicrobial courses had review documented in the notes on the day of the survey and 26% of the patients were on second or more antimicrobial course during the day of the survey.

Recommendations:

- Re-implement the Antibiotic Stop/Review date and Indication policy and IV to Oral Swich guidelines by
 - Education
 - Antimicrobial ward rounds
- Re-implement the CAP care bundle
 - Education
 - Antimicrobial ward rounds

This report will be feedback to:

• Each directorate via Directorate clinical governance meetings

- Antibiotic Committee
- Infection Prevention and Control Panel
- Medicines Use and Safety Panel Meeting
- Pharmacy clinical meeting

Monthly antimicrobial stewardship care bundles audits results (based on start smart then focus best practice)

	Feb-15	Mar-15	Apr-15
Indication documentation on drug chart	45%	58%	41%
Stop/Review documentation on drug			
chart	39%	49%	30%
Guidelines compliance	97%	97%	87%
% of IV Antimicrobials	64%	57%	44%
PPI Continued on patients on			
antimicrobials	15%	32%	40%

February to April 2015 – Medicine division

May to July 2015 Surgery division

	May-15	June-15	July-15
Indication documentation on drug chart	41%	38%	41%
Stop/Review documentation on drug			
chart	36%	38%	49%
Guidelines compliance	82%	74%	84%
% of IV Antimicrobials	80%	64%	82%
PPI Continued on patients on			
antimicrobials	33%	60%	63%

August to October 2015 AAU level 1

	Aug-15	Sep-15	Oct-15
Indication documentation on drug chart	41%	46%	56%
Stop/Review documentation on drug chart	34%	27%	56%
Guidelines compliance	97%	94%	100%
% of IV Antimicrobials	62%	50%	60%
PPI Continued on patients on			
antimicrobials	57%	67%	75%

Numerous interventions have been implemented to increase the first two elements of the care bundle

• Increased antimicrobial stewardship ward rounds

- Immediate feedback of results to the division
- Discussed at all teaching sessions for junior doctors and at divisional clinical governance meetings
- Stickers in the notes to remind prescribers

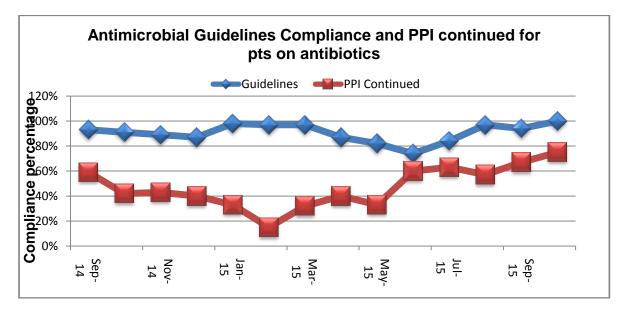
Good practice

- Guidelines compliance has always remained high
- Divisional leads have been supportive and have feedback to the teams.
- Monitoring systems for antimicrobials in place

Current actions and Recommendations

- 1. Grand round on 20th November 2015-"Weakest link in Antimicrobial Stewardship"
 - Dr Kandil will present Local epidemiology data including resistance compared to national data
 - Tejal Vaghela will present all audit data
- 2. Antibiotic Awareness Day campaign on 18th November 2015
 - Stand in spice of life
 - Pharmacy and IPC team on wards raising awareness
 - Teaching session for FY2
- 3. Learning points from audits
 - Quiz to increase knowledge regarding antibiotics
 - Address incidents reported for example
- 4. Antimicrobial stewardship rounds
 - Introduction of AAU rounds
 - *C-difficile* ward rounds with IPC nurses (implemented in September 2015)
- 5. Antimicrobial audits
 - Junior doctors are currently auditing the use of a sticker which has helped in increasing the percentage of compliance elsewhere, so we are waiting to see the result of this
 - November point prevalence audit data collection completed on 13th November 15. This included a new data set of review of antimicrobials documentation in notes. Results being analyzed.
 - November 2015 to January 2016 –antimicrobial care bundle audit will be conducted on Care of Elderly wards.
- 6. Teaching sessions
 - Re-enforce microbiology clinical aspects in teaching session
- 7. Review of current guidelines-based on national and local resistance patterns and national guidelines
- 8. Review of current patient drug chart

Compliance with antimicrobial guidelines:

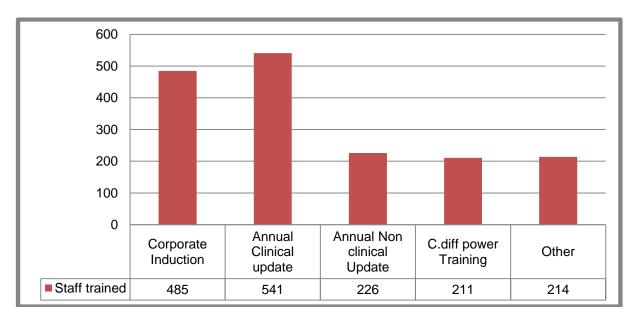


13.0 IPC TRAINING ACTIVITIES

Infection Prevention and Control is a key role for the team. It is widely recognised that ongoing education activity in IPC is required in order to improve healthcare worker compliance with infection prevention and control practices.

The IPCT undertakes a number of induction and educational updates to a wide range of key staff within the trust. The IPCT keeps attendance data from these sessions and supports the trust in its delivery of mandatory education for all staff. Targeted and Ad Hoc training is delivered to wards and departments.

Below are the training activities 2015 to date



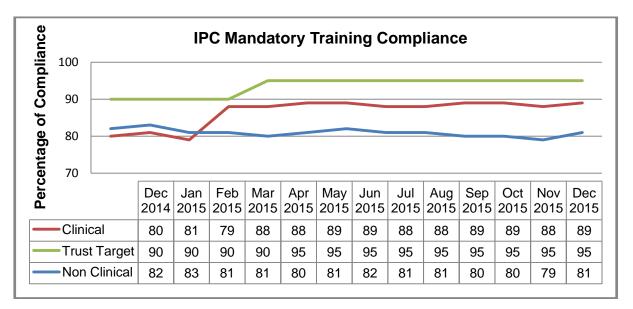
13.1 Power Training:

Following the increased incidents of *Clostridium difficile* the IPCNs have undertaken power training where we visit clinical staff in their areas to deliver short and quick sessions lasting from 10 minutes to 20 minutes on sealing issues, various topics have been covered in Power training e.g *Clostridium difficile*, MRSA and Norovirus..

During Q2 and Q3 the IPCNs also put in extra sessions to help support improve the training compliance.

14.0 INFECTION PREVENTION & CONTROL TRAINING COMPLIANCE IN WHHT

The Trust target for IPC mandatory training is 95% for clinical staff. Compliance is monitored via the bimonthly IPCP meetings. Below is the compliance for clinical and non-clinical staff.



15.0 IPC PROMOTIONAL ACTIVITIES:

15.1 WHO INTERNATIONAL HAND HYGIENE DAY

The trust observed the WHO international hand hygiene day on the 5th May 2015. There was a stand at the main entrance of WGH. This was to ensure thatthe team engaged members of the public and staff. There were also visits by the IPCNs to clinical areas to raise awareness on the importance of hand hygiene to staff, patients and visitors. During the visits the IPCNs encouraged patients to ask staff if they have washed their hands. The IPCNs organised various competitions.

Below are some of the pictures from the day.

Display stand:





IPCN Lucy; talking to some members of staff.



15.2 INFECTION PREVENTION LINK PRACTITIONERS:

The IPCN invite representatives from all departments across the trust to the Infection Prevention Link Practitioners bimonthly meetings. These give an opportunity to discuss IPC matters, in relation to individual areas and trust wide, any new guidance. The expectation is that the link practitioners share the learning in their staff/team meetings within their areas or wards. To date the topics that have been discussed are:

- Audits
- Clostridium difficile Infection
- MRSA care plans
- Decontamination of patient equipment
- CPE and Screening
- IPC Dashboard
- Norovirus, MRSA, Clostridium difficile Infection and documentation
- Dress Code and Infection Prevention and Control
- Water Management and Flushing

16.0 EXTERNAL VISITS: NHS Trust Development Authority

We had several visits from the NHS Trust Development Authority (TDA) head of IPC on the 29th and 30th July which was HCAI review visit for Watford site. Areas visited were ED, AAU, Aldenham ward and theatres.

IPC Summit

An IPC Summit was held on the 9th October 2015, this involved the IPCT, Estates and Facilities, divisional representation, the TDA and Herts Valley CCG. The summit focussed on the trust's compliance criterion 1, 2 and 4 of the Health and Social Care Act 2008 (update 2015). This was to give assurance to the trust board and the TDA that the trust has systems in place to monitor the risks related to water safety, that the environment where care is given is clean and appropriately maintained and also that the trust was providing accurate information on infection risk. The issues discussed at the IPC summit have already been covered earlier on in this paper.

The IPC summit paper was produced for the board and tabled on the QSG on 14th December 2015.

Recommendations following the IPC Summit:

- Outcomes of the meeting to be reported to the Trust Board
- Outcomes of the meeting to be reported to the TDA IDM
- Board development to update on The Hygiene Code
- Implementation of NICE guidance with support from NICE directly-
- Visit University Hospital of North Midlands for data management by the IPC-
 - The IPC Data Administrator following the Stoke Visit has adopted some of the efficient systems on data management and presentation.
- The TDA head of IPC visited on the 17th December 2015 following the completion of the remedial works on SCBU. The CDI action plan, RCA trends, cleaning compliance and antibiotic prescribing, flu programme, were discussed.
- The extended team was commended for their hard work and improvement by the TDA Head of IPC.

Flu Vaccination:

The Flu campaign was launched on the 19th October 2015. To date 30% of staff has received the Flu vaccine. The target set by the DH this year is 75% and the target set by the trust is 80%. An extra nurse is now in post to help support the Flu vaccination. The Occ Health are also targeting staff in the Staff Canteen between 12:00hrs and 14:00hrs on selected days.

17.0 RECOMMENDATION

The Board is asked to note the report and progress made against the hygiene code.

Nyarayi Mukombe Assistant DIPC

January 2016

Appendix 1 Trust Compliance with the Code of Practice:

Infection Prevention & Control Annual Plan 2015-2016 (updated following revised Code) To comply with the Health and Social Care Act 2008 (updated 2015)

The purpose of the Infection Prevention & Control (IPC) annual plan is to set out the activities the organisation needs to do to ensure that safe quality care is provided. It will also provide assurance to the board that the programme of work if delivered will minimise any risks. The proposed activities of the IPC team, which will ensure that the service meets the statutory requirements. This programme is based around compliance with:

• The Health and Social Care Act 2008 (updated 2015) – Code of Practice on the prevention and control of infections and related guidance also known as The Code.

The Hygiene Code is underpinned by ten compliance criteria, the programme of work is mapped to the compliance criteria, which will ensure that the Trust continues to maintain and strengthen its compliance. The annual plan is signed off by the Quality and Safety Group.

Monitoring delivery of the program

Progress against the programme will be monitored by the Infection Prevention and Control Panel (IPCP).

Key:		
GREEN (G)	100%	Full compliance
AMBER (A)	71% - 99%	Action required
BROWN (B)	50% - 70%	Urgent action required
RED (R)	=< 49%	Trust priority

Key:

Issue / Problem	Progress/Assurance	Lead	Timeline	Progress/Assurance
				Q1, Q2 and Q3
	The TLEC, Quality and Safety Group (QSG) and Infection Prevention and Control Panel (IPCP) will receive the Annual IPC Report. 2014/2015	DIPC	October 2015	Completed
The Board will monitor the Trust compliance with the Health and Social	 The Board will receive Infection Prevention & Control (IPC) updates and any key issues Instant reporting of any emerging Healthcare Associated issues MRSA BSI annual trajectory is 0 Clostridium difficile infection (CDI) annual trajectory is 23 	DIPC	Monthly	Quality Safety Report Monthly Assurance Board Report (IPR)
Care Act 2008.	 The Board will receive information relating to assurance on compliance with the Code of Practice, CQC outcome 8 and key indicator targets via the Quality and safety group and challenge concerns in relation to compliance via the DIPC's Hygiene Code Paper 	DIPC	6 monthly	Report discussed at the IPCP in November 2015, submitted to the QSG in January 2016
	Divisional objectives		-	
	Each Division will table clinical issues and exception reports for the Quality and Safety group actions to the IPCP	IPC leads/ HoN/ HoM	Monthly	Each Division has submitted their exception reports and action plans monthly and bi monthly from August 2015.
All divisions to ensure that the reduction of healthcare	 All staff attend Trust induction and mandatory update sessions Trust target for mandatory training is 95% 	IPC/ HoN/HoM	Monthly	Trust IPC training compliance April 86% ; May 81%; June 83%; July 88 %; Aug 88% Sept 89% . The trust is not achieving the 95% target. Extra sessions have been advertised.
associated infections is a	Lessons from IC SIs/outbreaks are reviewed monthly, reported to the IPCP and Quality and safety group and acted upon.	HoN/HoM	Monthly	Exception reports to IPCP submitted by the divisions
priority.	All High Impact interventions inc hand hygiene scoring less than 95% with formulate an action plan with evidence of actions taken and returned to IP&C Team, this which will be discussed at the Divisional Governance meetings	Ward/Dept Manager/ Hon/HoM	Monthly	Completed action plans sent to IPCT. IPCT has undertaken support audits to areas with unsatisfactory compliance.
	Any member of staff persistently not complying to hand hygiene policy or high impact intervention will be named on audits for review and escalation as required	Ward/Dept Manager/ HoN/HoM	Monthly	Captured in the exception reports and discussed at the IPCP meetings
	Participate in the Test Your Care (TYC) audits	HoN/HoM	Monthly	All areas participating TYC Inpatient areas audited

Issue / Problem	Progress/Assurance	Lead	Timeline	Progress/Assurance
				Q1, Q2 and Q3
	Isolate patient with an infection e.g diarrhoea within two hours (DH) to reduce the risk of cross infection	Matron/ward manager	Ongoing /monthly	Monthly reports April 70% ; May 85%; June 81%; July 78%; Aug 75% Sept 75% Support given to wards unable to isolate patients to ensure there is no transmission of infection.
	• For all new equipment to be purchased cleaning instruction for the equipment should be obtained from the manufacturer and these submitted to IPCT for approval before a purchase is agreed.	Hon/HoM Matron	As required	These are assessed by the IPCNs to ensure the equipment can be adequately decontaminated.
	Patient equipment e.g Commodes, BP cuffs must be cleaned in between each patient use	Ward/Dept Manager/ Matron	As required	Captured in the monthly HII8 audits and weekly commode audits. Bed space & equipment checklist verified through test your care audits
	Patient isolated in side room for infection control reasons should have dedicated equipment for use e.g disposable BP cuffs, hoist slings.	Ward/Dept Manager/ Matron	As required	Monitored via the HII8 Audits
	Equipment decontamination /cleaning schedules that specifies cleaning standards for equipment such as commodes, BP cuffs are in place	Ward/Dept Manager/ Matron	Monthly /Ongoing	Test your care audits
	6 monthly environmental audits to ensure that all ward areas are well maintained and appropriately managed to reduce the risk of infection (April/May and Oct/Nov)	Ward/Dept Manager/ Matron	6 monthly (April/May and Oct/Nov)	All areas Undertook audits in Q1
	Refurbishment program to be developed by each ward and in conjunction with estates	HoN/Head of estates	As required	Some ward have submitted list of work to the Estates team.
	Divisions take ownership of RCA and are completed in a timely manner (within 14 days).	HoN	As required	Monitored via the LHCAI meetings from July via the monthly divisional governance meetings
	Estates and Facili	ties; Operational		
Duty 1 and 2	 Assure quality of environmental cleanliness/ audit of the clinical areas All areas should have a schedule of cleaning responsibilities, and frequency include an SLA 	Head of Facility	Monthly On going	Cleaning monitoring officers undertake the audits Monitored via monthly IPCP, from July (meetings are now Bi monthly)
	Ensure deep cleans are carried out as per schedule (every quarter and any estates work is carried out prior to the deep clean	Heads of Facilities & Estates	As per Deep clean programme	The deep clean program is behind:30% overdue deep clean by 1 month;10% overdue by 3 months, The paper will be taken to the

Issue / Problem	Progress/Assurance	Lead	Timeline	Progress/Assurance		
				January IPCP then QSG.		
	Annual PLACE inspection	Head of Facilities	Yearly	National PLACE audit May 2015 Mock PLACE are in place monthly.		
	 Involve Infection Prevention and Control in all building works (from planning to finish of the building works) 	Director of Estates	As required	Involved in the Endoscopy, SCBU, Estates need to send the IPCT the trust wide programme for all works.		
	 Minutes and papers from the Water Safety Group meetings to be tabled at the IPCP Water safety issues escalated to the Board via IPCP 	Head of Engineering	Monthly	All Monthly minutes have been tabled at the IPCP & issues escalated to the Quality and Safety group via IPCP; IPC summit paper, NNU Water Safety paper		
	Review Trust water safety plan	Water safety Group	September 2015	Water safety policy is in place and in date Water Safety Plan will go to the January IPCP for ratification		

Infection Prevention & Control Team Plan

Issue / Problem	Actions	Lead	Timeline	Progress/Assurance Q1, Q2 and Q3
revention and control of infection. and consider how susceptibility of environment and other users may pose	 The IPCP will receive monthly information on: Mandatory surveillance (MSSA, MRSA & E coli bacteraemia and CDI) Audits IPC Training compliance Progress on action plans Outbreaks & Incidents Surveillance of other HCAIs New publication relating to IPC/Microbiology 	ADIPC ICD	Monthly/ on going	Mandatory surveillance figures discussed at all IPCP meetings Enhanced surveillance of Carbapenemase producing- negative bacteria Briefing note on mycobacterium infections associated with heater cooler units. CDI increased incidents, May, June (action plan in place) Updated Health and Social care Act 2008 (2015) TB incidents MERS PHE, Legionella risk assessment
and co der hov ent and	 Provide reactive service to meet needs of incidents/enquiries/outbreaks 	ADIPC	As required	Tuberculosis incidents Croxley MRSA (Colonisation) outbreak August 2015 High legionella counts on SCBU October 2015
prevention s and consi environme	 Work proactively with multi-disciplinary staff and departments to reduce risk of HCAI attend Divisional Governance meetings 	ADIPC/ Lead Nurse/I CD	Monthly	Q1 LHCAI meeting attendance Q2 IPCT attended the Divisional Governance meetings
Je and monitor the prevention and con e risk assessments and consider how any risks that their environment and o	 Work collaboratively with Clinical Commission Group, Trust Development Authority & the Hertfordshire HCAI reduction group 	ADIPC	Monthly /as required	Q1 and Q2 the ICD & ADIPC attended the monthly HCAI reduction group & bi monthly Herts Whole Economy ICC Group
and n risk a: vrisł	Infection Surveillance software	ADIPC/ CGI	January 2016	Not compliant; Business case is being progressed, currently using the paper system.
manage ms use rs and ar	 Collate and submit alert organisms as directed by the Public Health England onto the data capture system. 	ADIPC	Monthly	Monthly submission in the PHE DCS, completed for Q1 and Q2
 Systems to manage and These systems use risk service users and any ri to them. 	 Work collaboratively with Operations teams, matrons and ward managers: review of side rooms Appropriate placement of patients with a known or a possible infection 	Lead Nurse IPC	As required	IPCNs continue to review side rooms to ensure appropriate placement of patients by the operations team. Failure to isolate patients with 2 hours is datixed Monthly isolation report is produced by the IPCT for the clinical areas.
Issue / Problem	Actions	Lead	Timeline	Progress/Assurance

2. Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections.	Audits by the Infection Prevention and Control nurses: Decontamination of patient equipment (HII8) Personal Protective Equipment Management of Linen Isolation Precautions Management of sharps Test your care audits Audit availability of hand hygiene facilities in the trust	Lead Nurse ADIPC	As per audit schedule December 2015/January 2016 & divisiona	Monthly De have been to Audit is in p	Monthly test your care peer audits Monthly Decontamination of patient equipment (HII8) have been undertaken for Q1 , Q2 and Q3 Audit is in progress	
Issue / Problem	Actions	staff and	other	Lead Antimicrobial	Timeline	Progress/Assurance Q1, Q2 and Q3
3. Ensure appropriate antimicrobial use to optimise patient outcomes and to reduce the risk of adverse events and antimicrobial resistance	 prescribers. Regular feedback of audit data to various Divisional and governa Public engagement activities e.g European Antibiotic Awareness Antimicrobial management team consisting of Microbiologists ar pharmacist/Ward pharmacists Antimicrobial Committee chaired by Consultant Microbiologist retherapeutics Committee and Infection Prevention Control Panel (In progress) a mandatory training module on antimicrobial press Evidence based guidelines on Trust intranet and App Antimicrobial datix incidents reported on monthly antibiotic report and discuss at governance meeting as appropriate 	 Educational sessions to Junior doctors, nursing staff, pharmacy staff and other prescribers. Regular feedback of audit data to various Divisional and governance meetings. Public engagement activities e.g European Antibiotic Awareness day Antimicrobial management team consisting of Microbiologists and antimicrobial pharmacist/Ward pharmacists Antimicrobial Committee chaired by Consultant Microbiologist reporting to Drugs and therapeutics Committee and Infection Prevention Control Panel (In progress) a mandatory training module on antimicrobial prescribing. Evidence based guidelines on Trust intranet and App Antimicrobial datix incidents reported on monthly antibiotic report and trends monitored and discuss at governance meeting as appropriate Monitoring broad spectrum antimicrobial consumption monthly (Antibiotic report) Antimicrobial stewardship audits Surveillance of local resistance (microbiology) Weekly antimicrobial stewardship rounds and C-diff rounds OPAT pathways on antimicrobials Weekly MDT –orthopaedics 				European Antibiotic Awareness day monthly antibiotic report and trends monitored and discuss at governance meeting as appropriate Weekly antimicrobial stewardship rounds and C-diff rounds Daily antimicrobial rounds on intensive care
Issue / Problem	Actions			Lead	Timeline	Progress/Assurance Q1, Q2 and Q3

service users, their visitors or nursing/medical care in a	 Maintain information leaflets for patients and visitors Ensure all patient and public information leaflets are current and available on the Trust website 	Lead Nurse IPC	As required	Current leaf lets are in date.
rvice users, their nursing/medical	Maintain information leaflets for contractors/volunteers/bank & locum staff	ADIPC	January 2016	Due for review end of January 2016
service or nursi	 Participate in international Hand Hygiene Awareness Day. Activities that include patients, visitors and staff – display stands 	IPC Team	May 2015	Activities that include patients, visitors and staff – display stands, competitions
Provide suitable accurate information on infections to d any person concerned with providing further support nely fashion	 Participate in international Infection Prevention and Control Week Activities that include patients, visitors and staff – display stands 	IPC Team	October 2015	Display stands in the staff canteen, visits to clinical areas, talks with patients , staff and members of the public. Various competitions
on on ir ling fur	Maintain up to date polices and guidelines for Infection Prevention on the Trust intranet.	ADIPC	As required	Hand Hygiene policyMRSA Policy
ble accurate information on infec concerned with providing further	Staff information leaflets to be available	ADIPC/ Lead IP&C Nurse	As required	Current leaf lets are in date.
accurate icerned v	Inform G.P. if patients are discharged before MRSA results are known and new MRSA	Lead IP&C Nurse	As required /daily	IPCNS have continued to send MRSA GP letters
le suitable a person cor shion	Inform G.P of admitted patients indentified to have <i>Clostridium difficile</i>	Lead IP&C Nurse	As required /daily	IPCNS have continued to send Clostridium difficile GP letters
4. Provide suit and any perso timely fashion	 Flagging on Patient Administration System/ICE information system for appropriate management. 	IPCT	As required/ daily	July August and September 215,Alerts put in place for CPE contacts following identification of a CPE patient on various wards.

	Continue inserting information stickers for alert organisms in the health records of patients.	IPCT	As required/ daily	IPCNs have continued to visit wards were patients have an alert organism to ensure appropriate management and placement, this is also documented in the patient's notes/Kardex
	 Raise awareness on current IPC issues within the Trust; "Top Tips" IPCN news letter 	IPCT	Bi Monthly	Hand hygiene MRSA decolonisation protocol Clostridium difficile Infection
Issue / Problem	Actions	Lead	Timeline	Progress/Assurance Q1 , Q2 and Q3
of	All patient `s microbiological results are managed as a priority within the IP&C team.	Lead Nurse IPC	As required/ daily	Patients are visited on the wards and ward staff liaised with ensuring that staff understand and are aware of the correct infection prevention & control measures required for that particular organism
to to co	Ensure timescales for RCA/PIRs reporting are met and corrective actions/learning shared across Divisions through Clinical governance meetings	IPCT/HoN	As required/ monthly	RCA actions followed up in the LHCAI meeting and Divisional Governance meetings, timescale for completing are not being achieved.
5. Ensure prompt iden who have or are at ris infection so that they appropriate treatment transmitting infection	Appropriate use of detection, management and isolation of diarrhoea flow chart for timely isolation of affected patients.	IPCT/HoN	As required /daily	Isolation report, Failure to isolate within 2 hours is datixed.
5. Ens who h infect appro transr	Audit MRSA and <i>Clostridium difficile</i> care pathways and feedback results to clinical areas, HoN/HoM and IPCP	Lead Nurse/ ADIPC	Monthly	done monthly though Test your care
	Mandatory update to includes outbreak management and isolation	Lead Nurse	As required /daily	Mandatory update to includes outbreak management and isolation included in the IPC Mandatory update
	Inform bed management /ED staff of any outbreaks (e.g of Norovirus or any other infection) in local care home and NHS Trusts; Circulate report from SMH PHE	ADIPC/ Lead Nurse	As required /daily	Alerts from PHE were sent out to key staff, Bed managers/operation team, HoN, ED and on call managers
Issue / Problem	Actions	Lead	Timeline	Progress/Assurance

				Q1, Q2 and Q3
ling charge their controlling	Review and update IPC Training schedule for all Trust employees including contractors and volunteers : Mandatory, Induction; Ad hoc related to DH & local initiatives	Lead Nurse	April 2015 Annually and as required	Mandatory, Induction; Ad hoc related to DH & local initiatives training slides have been reviewed and up to date with current guidance.
workers (incluc ware of and dis preventing and	 Review formal training on peripheral line insertion, CV/aseptic technique, ongoing management to be included in Education /training review; (Peripheral IV study day, Central IV study day, Venepuncture and Cannulation) 	PDN	As required when new updates are published	As required when new updates are published
nsure that all care volunteers) are a in the process of	Link Practitioner Educational meetings – maintaining records of attendance	Lead Nurse	Bi- monthly	Various topics discussed at the meetings: CDI; MRSA,, CPE, Documentation
6. Systems to ensu contractors and vo responsibilities in t infection.	 Infection Prevention is included in all Job descriptions (JD) and all new staff should attend Trust Induction (IPC is included in trust Induction for new staff. 	Human Resources	As required	IPC is included in all new staff JD.
Issue / Problem	Actions	Lead	Timeline	Progress/Assurance Q1, Q2 and Q3
7. Provide or secure adequate isolation facilities	 Ensure adequate isolation precautions and facilities as appropriate to prevent or minimise the spread of infections Ongoing review of capacity within isolation ward to meet clinical need. 	IPCNs	As required /daily	IPCNs review side room as required to ensure appropriate placement of patients.
	Isolation Policy is audited by the IPCT annually	ADIPC/ Lead Nurse IP&C	January 2016	Due to be audited in January 2016; Policy under review
7. Provic adequate facilities	Audit side room availability including rooms with both negative & positive ventilation	ADIPC/ Lead Nurse IP&C	As required	

	• The IPCT will provide advice and support on the management of infectious patients during an increased incidence of infection or outbreak to contribute in the management of appropriate usage of the side rooms.	ADIPC/Lead Nurse	As required/ daily	Croxley MRSA outbreak, TB incident
Issue / Problem	Actions	Lead	Timeline	Progress/Assurance Q1, Q2 and Q3
8. Secure adequate access to laboratory support as appropriate	 Ensure the microbiology laboratory has appropriate protocols and standard operating procedures as required for accreditation by Clinical Pathology Accreditation (UK) Ltd. 	ICD/ Consultant Microbiologist	As required	
Issue / Problem	Actions	Lead	Timeline	Progress/Assurance Q1, Q2 and Q3
esigned for r event and sured impact h audit.	Policies are updated with review dates and clearly marked up where they link to other policies both on the actual policy. New policies/guidelines:	ADIPC/Infection Control Doctor		
es, d ovide to pı s ens s ens rroug	 Building and Renovation in hospital (NEW) 	ADIPC	February 2016	
 Have and adhere to policies, designed for the individual's care and provider organisations, that will help to prevent and control infections. Compliance with key policies is ensured through the implementation of high impact interventions and monitored through audit. 	 Purchase, trial and loan equipment (NEW) 	ADIPC	March 2016	
Issue / Problem	Actions	Lead	Timeline	Progress/Assurance Q1, Q2 and Q3
10. Providers have a system in place to manage the occupationa I health needs and obligations of staff in	Annual Gap analysis of training needs for staff	Lead Nurse IPC	April 2015 Annually	Completed

	 Review Annual training programme for all staff including contractors, locums, volunteers, bank & agency. 	ADIPC/ Lead Nurse IPC	April 2015	Completed
F	 Related Occupational Health policies/procedures are in date: management of occupational exposure to infection a risk assessment and appropriate referral after accidental occupational exposure to blood and body fluids having arrangements for identifying and managing healthcare staff infected with hepatitis B or C or HIV and advising about fitness for work and monitoring as necessary 	Occupational Health Manager/ Health and Safety Manager	As required	Needle sticks injury reports taken to the Health and safety committee. These reports to be tabled at the IPCP as well.
	• Arrangements in place for regularly reviewing the immunisation status of care workers and providing vaccinations to staff as necessary in line with <i>Immunisation against</i> <i>infectious disease</i> ('The Green Book')	Occupational Health Manager	On Going	Not compliant: Mitigation, Immunisation status / vaccination history is recorded in staff member occupational health records. The risk number is 3046 Risk score is 12
	Flu campaign and vaccination of Health Care Worker	Occupational Health Manager	October 2015	To date 30% have received the Flu vaccine; An extra nurse is now in post to support the flu vaccination, visiting clinical areas and stand in the staff canteen between 12:00 to 14:00hrs.

APPENDIX 2 WEST HERTFORDSHIRE HOSPITALS NHS TRUST – REDUCTION OF CLOSTRIDIUM DIFFICILE ACTION PLAN following Period of increased incident of CDI in May and June 2015. Updated November 2015

This action plan is intended to:

- Assist all clinical areas to focus on patients with diarrhoea and to assess their risk of Clostridium difficile.
- Ensure all ward staff are familiar with Trust policy and action required for all patients with diarrhoea

PRIORITY ISSUE TO BE ADDRESED	ACTION REQUIRED TO ENABLE	DELIVERY DATE	RESPONSIBLE OWNER	PROGRESS UPDATE		
Monitor of actions from the Root Cause Analysis (RCA) Leadership and clinical engagement in	IPCT to attend Divisional Clinical Governance meetings	July 2015	Tracey Carter DIPC	As from July 2015 the IPCT are now attending the Divisional Governance meetings.		
the process	Reconvene LHCAI meetings to monitor actions from RCAs	30 November 2015	ADIPC	This has now been implemented.		
	Ensure timescales for RCA reporting are met (14 days)	Immediate /ongoing	HoN/HoM	Currently not being achieved mainly by medicine division, the IPCNs are supporting.		
	Corrective actions/learning shared across Divisions					
	The medical division will share key learning points at their clinical governance from all the RCAs	August 2015	HoN/IPCT	Thematic review of the Q1 cases, these have been discussed at the Medicine Divisional Governance meeting.		
		End January 2016	HoN/IPCT	Thematic review of the Q2 cases		
	Surgery division to share key learning points at their clinical	September 2015	HoN/IPCT	Thematic review of the Q1 cases, these have been discussed at the Surgery		

	governance from all the RCAs			Divisional Governance meeting.
		January 2016	HoN/IPCT	Thematic review of the Q2 cases
Improve compliance to trust guideline for antimicrobial prescribing	Implement weekly review of CDI cases (in patients) on ward	August 2015	Antimicrobial pharmacist, IPCNs and Microbiologist	This has been implemented, with weekly rounds by the IPCT
	Audit antimicrobial care bundle in clinical areas	Monthly	Antimicrobial pharmacist	Q1 Surgical wards done
	Continue with antimicrobial stewardship rounds Raising awareness of prescribers for high risk antimicrobials	Review end January 2016	Antimicrobial pharmacist, and Microbiologist	Weekly, this will be reviewed end of January 2016
	Daily review of antibiotics on ward rounds by doctors	Review end January 2016	Clinical Directors Medical teams	Undertaken by medical teams, For review end of January 2016 by IPCT
	C-diff RCA analysis and ongoing antimicrobial stewardship for FY1 and FY2	July and August 2015	Antimicrobial Pharmacist	Completed Session delivered by antimicrobial pharmacist.
	Reviewing the antimicrobial guidelines and introduce new guidelines for care of elderly	February 2016	Consultant Microbiologist	
Use of proton pump inhibitors (PPI)	Reviewed daily by the medical team and stopped if possible as per Trust guidelines	Review end January 2016	Clinical Directors Medical teams	PPI usage and Care bundle audits (PPI continued) reported in the monthly antibiotic report discussed at the bi monthly IPCP
Improve management of antigen positive patients	All antigen positive results will be flagged on the ICE system (so that clinical team is aware of the need to discuss antibiotics with microbiology consultant if needed during current or subsequent admissions)	18 December 2015	Consultant Microbiologist/IPCN	Completed, All Antigen positives are reported on ICE
Timely isolation of patients admitted with diarrhoea	Launch of Risk assessment booklet across the trust	August 2015	Quality Lead nurse	New documentation implemented. Audit of use of the IPC section was 64% for WGH. Plan to re educate staff and re audit in

				January 2016.
Training and education to raise more awareness of CDI and its management	Targeted training (Power training) in clinical areas on Isolation, hand hygiene, decontamination of medical equipment, PPE, specimen labelling and sending them in timely manner	Immediate/ on going Review end of January 2016	ADIPC	For staff that are on permanent night duty, a Power training pack is available on the ward.
	Support Hand hygiene audits on wards with a new WHHT apportioned C.diff	Review end of January 2016	ADIPC	Compliance monitored via the IPCP On going until a target of >95% compliance is reached for 3 consecutive weeks
	Continue with monthly audits for the decontamination of medical equipment (high impact intervention no.8)	Monthly	ADIPC	Compliance monitored via the IPCP
	Additional support audits for decontamination of medical equipment (HII No 8) on wards with a new WHHT apportioned C.diff	Review end of January 2016	ADIPC	Compliance monitored via the IPCP On going until a target of >95% compliance is reached for 3 consecutive weeks
	The June IPC newsletter issue of the monthly 'Top Tips focuses on <i>Clostridium difficile</i> .	June 2015	ADIPC	Circulated to the Matrons, HoN, ward managers and IPC Link practitioners.
	December IPC newsletter 'Top Tips to focuses on <i>Clostridium</i> <i>difficile</i> .	December 2015	ADIPC	Circulated to the Matrons, HoN, ward managers and IPC Link practitioners.
	Grand round to discuss CDT testing and guidelines	November 2015	Antimicrobial pharmacist, and Microbiologist	Completed Grand round in December discussed CDT testing and guidelines by Dr Kandil
Update to all staff and volunteers on our CDI cases and plans for improvement	Share themes identified from 2014/15 and Q1 CDI cases and prevention	July 2015	DIPC	E update sent to all staff and volunteers in July 2015
Inadequately cleaned commodes/toilet can be a source of cross infection	Nursing staff must clean commodes in between patient use;	Review end of January 2016	HoN/HoM	Compliance monitored IPCP

	tag, date and sign them. Letter of concern is issued to staff that are non compliant Toilets to be cleaned at least x2 daily & in addition upon request of ward staff. Cleaning sheets to be signed when facility cleaned/checked		Medirest	Compliance monitored by ward staff
Medical equipment can be a source of contamination and cause cross infection between patients	Continued emphases on the importance of dedicated patient equipment in side rooms to limit the potential risk of transmission of infection.	Review end of January 2016	IPCT/HoN/HoM	Compliance audited by IPCN bi monthly through the HII8 audit
	The nurse in charge to be sure that all discharged patients have their mattresses cleaned, checked	Review end of January 2016	HoN/HoM	This is audited through test your care in the 24 in patient areas and paediatrics
Standards of ward cleaning are paramount (assurance of quality of cleanliness)	Nurse in charge to check at the beginning of the early shift if this has taken place (daily quality ward checks)	Review end of January 2016	HoN/HoM	Different daily quality checks have been developed for ward sisters
	Monthly ward quality checks by matrons	Review end of January 2016	HoN/HoM	Monthly quality checks for matrons plan being revised
	Deep clean program to clinical areas	Review end of January 2016	Facilities Head of Compliance & Contracts	Rolling programme is in place, challenges due to be capacity; 30% of areas are overdue a deep clean by at least 1 month.
Wards become cluttered with patients belongings and the cleaners cannot do their job properly	Every shift the nurse in charge to allocate a member of staff to walk the ward and declutter.	Immediate/on going	Ward manager	Test your care audits in the 24 in patient areas
Operational capacity issues affecting isolation of patients with diarrhoea (within 2 hours)	Ongoing review of capacity within isolation ward to meet clinical need.	On going	IPCN/Ward managers/Matrons	Daily side room reviews by the IPC nursing team

APPENDIX 3

CLOSTRIDIUM DIFFICILE OBJECTIVES FOR NHS ORGANISATIONS IN 2015/16

In 2014/15 NHS England introduced a change in the methodology for calculating organisational CDI objectives, with recommendations for commissioners to consider sanctions for breach of CDI objectives only where those CDIs were associated with lapses in care.

In 2015/16 this process remains unchanged. The contractual sanction that can be applied to each CDI case in excess of our objective will remain as ± 10.000 .

The commissioner makes the final decision on whether a case counts for the purpose of contractual sanctions. If the outcome of the process is that a case is removed from trust's trajectory for the application of contractual sanctions, the case will still remain on the data capture system and will remain in the surveillance numbers for cases for the trust.

During the review of the case the CCG will consider issues related to risks for *C. difficile* infection including:

- Link to other cases
- The management of antibiotics treatment
- The management of other medications including PPIs
- The management of the treatment of the C. difficile infection for this case
- Patient management for this case
- Standards of hand hygiene,- the trust target is 95%
- Standards of cleaning of patient equipment the trust target is 95%
- Standards of cleaning of the clinical environment; the trust target is 95%; for high risk areas like ITU, SCBU and Theatres the target is 100%
- Uptake of infection prevention and control training for clinical staff; the trust target is 95%