

Berkshire Healthcare NHS Foundation Trust

**INFECTION PREVENTION AND CONTROL ANNUAL REPORT
APRIL 2014 - MARCH 2015**

Formal Executive Meeting

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Executive Summary

This report provides an overview of the infection prevention and control arrangements and the state of healthcare associated infections (HCAI) for Berkshire Healthcare NHS Foundation Trust.

The Director of Nursing & Governance is the nominated board member responsible for infection prevention & control and undertakes the role of Director of Infection Prevention & Control. They are supported by the Infection Prevention & Control team who are responsible for providing an infection prevention & control service to support operational staff.

The Infection Prevention & Control Strategic Group fulfils the requirements of the statutory Infection Control Committee meeting four times per year and reports into the Quality Executive Governance Group.

Patient safety and tackling healthcare associated infection continues to be a key priority. BHFT did not exceed its target for *Clostridium difficile* in 2014-15 and will continue to work towards the trajectory for 2015-16. BHFT did not exceed its target for MRSA bacteraemia infections. In addition BHFT have taken a zero tolerance approach to any bacteraemia developed within the in-patient units, with root cause analysis undertaken to identify and share learning.

All Trusts have a legal obligation to comply with 'The Health & Social Care Act (2008) - part 3 A Code of Practice for the Prevention and Control of Health Care associated Infections'. The act clearly sets criteria to help NHS organisations plan and implement strategies to prevent and control HCAI. The Infection Control Programme articulated our development needs in relation to the act and this report acknowledges progress in delivering this. Following recent consultation it is anticipated that the Code of Practice will be updated in 2015-16 to include a greater focus on antimicrobial stewardship. It is hoped that when the revised Code of Practice is published that BHFT will be well placed to achieve compliance with this due to the work undertaken in 2014-15.

A challenge for the year ahead is to continue to embed infection prevention & control practices within service across the organisation. The Infection control programme and overarching infection prevention and control strategy sets clear objectives for the organisation to achieve; this is supported by the infection prevention & control team.

Our plans and key priorities are to deliver the highest infection prevention & control standards to prevent avoidable harm to patients from healthcare associated infection.

Helen Mackenzie
Director of Nursing and Governance
Director of Infection Prevention and Control (DIPC)

Introduction

This report highlights the achievements, the work undertaken and the progress made in 2014-15 by Berkshire Healthcare NHS Foundation Trust (BHFT) in relation to infection prevention and control. This has been another challenging year for infection control both locally and nationally. The increasing emergence of resistant organisms and the Ebola crisis in West Africa have put pressure on infection prevention & control nationally and the impact has been felt locally. BHFT have cared for a greater number of patients with these emerging resistant organisms and been required, along with the rest of the Thames Valley, to undertake emergency planning in preparation for any suspected Ebola cases.

BHFT is responsible for the prevention and control of infection within its services to minimise the risk of healthcare associated infections to patients, staff and visitors.

Infection Prevention and Control remains a high priority for all NHS Trusts. The implementation of the Health and Social Care Act 2008 has set a duty to ensure that systems to prevent healthcare associated infections and compliance with policies are embedded in practice and a corporate responsibility.

The infection control programme for 2014-15 outlined the priorities and objectives for the year. This report gives further detail on this work and sets our plans for the 2015-16.

Infection Control Arrangements and Budget Allocation

Berkshire Health Care Foundation Trust serves a population of approximately 870,000 people providing a range of community and mental health services across the whole of Berkshire as well as inpatient beds on the Upton, St Mark's, Wokingham, Heatherwood (ceased June 2014), Prospect Park and West Berkshire Community Hospital sites.

The team currently consists of:

Catherine Greaves	1 WTE	Head of Infection Prevention & Control (Community Services)
Diana Thackray	1 WTE	Head of Infection Prevention & Control (Inpatient Services)
Smitha Anil	1 WTE	Infection Prevention & Control Specialist Nurse
Tracy Allen	1 WTE	Infection Prevention & Control Nurse (commenced January 2015)
Angela Ward	0.6 WTE	Infection Prevention & Control Administrator

Support is also provided by Dr Mike McIntyre for the east via an SLA which includes: attendance at the IPCSG, monthly data summary and ad-hoc clinical advice when required. The role of Director of Infection Prevention & Control (DIPC) is undertaken by the Director of Nursing & Governance who has board level responsibility for infection prevention & control.

In 2014-15 the team structure and roles were reviewed. It was agreed that for strategic leadership of IPC, Catherine Greaves will lead on Community Services and Diana Thackray on Inpatient Services. This change commenced from 1st January 2015.

Risk Management/Clinical Governance

The Infection Prevention & Control Governance arrangements are available on Teamnet <http://teamnet.berkshire.nhs.uk/clinical/infectprevcont/Pages/home.aspx>. These arrangements are essential in working to resolve issues identified and ensure compliance with the Health & Social Care Act and other risk management legislation.

The Health & Social Care Act 2008/Care Quality Commission compliance

The Health & Social Care Act came into force in 2008, was reissued in December 2010 to include primary dental and independent ambulance providers and primary medical care. The Act is currently under review and it is anticipated that a revised version will be issued in 2015.

The Care Quality Commission continues to undertake visits to Acute, Community and Mental Health Trusts to assess compliance with this Act. BHFT has continued to maintain unconditional registration with the Care Quality Commission for infection prevention & control and other registration requirements across the organisation.

Infection Prevention & Control Strategic Group

This Group has been chaired by the Deputy Director of Nursing & Governance meets quarterly. The aim of the group has been to ensure that robust systems are in place for managing infection prevention and control across Berkshire Healthcare Foundation Trust, and ensure compliance with the Health and Social Care Act 2008. The Group provides assurance on infection control & decontamination and other related issues to the Safety Experience & Clinical Effectiveness Group.

Infection Prevention & Control Working Group (IPCWG)

The Infection Prevention & Control Working Groups (East & West localities) are chaired by the Heads of Infection Prevention & Control and meet quarterly or as needed to fulfil their function. The aim of the group is to act as the operational forum to facilitate the implementation, maintenance and review of effective systems and behaviours to support the prevention and control of infection and ensure compliance with the Health and Social Care Act 2008 through the completion of work programmes and delivery of the Trust Infection Prevention & Control Strategy. The IPCWG groups report to the Infection Prevention and Control Strategic Group. The two groups follow the same agenda and exist in order to facilitate attendance at meetings for the localities they serve.

The Infection Prevention and Control Programme

The majority of the infection prevention and control programme for 2014-15 has been met, outstanding issues are as follows:

- Production of the antibiotic audit
- Public release of IPC annual report
- Development of further patient information on the trust internet site – this has been delayed pending phase 2 of new trust internet site
- Development of IT system for surveillance in the east of the county – this is reliant on being able to access the surveillance system being procured by the acute trust and is ongoing.
- Review of staff immunisation records – this is ongoing.
- Addition of respite units to linen contract

Appendix 1 describes the Infection Prevention and Control Programme planned for the year 2015-16. Outstanding items from 2014-15 programme have been included within this and 'due dates' have remained unchanged.

Surveillance

There is a national mandatory requirement for trusts to report all cases of *Clostridium difficile* infection, MRSA, MSSA, *Escherichia coli* and GRE bacteraemia to Public Health England. These are reported by Frimley Health NHS Foundation Trust for the East and the Royal Berkshire NHS Foundation Trust for the West as part of the Service Level Agreement.

Clostridium difficile

From 2014-15, organisations have been required to assess each CDI case to determine whether the case was linked with a lapse in the quality of care provided to patients in order to increase understanding of the quality of the care and highlight areas where care could be improved. The Co-ordinating Commissioner under each commissioning contract considers the results of assessments. Where CDI cases are not linked with identifiable lapses in care, the cases are not considered when contractual sanctions are calculated. A monthly Berkshire West Health Economy *C. difficile* Meeting exists to discuss and agree whether cases are avoidable or non-avoidable and to share lessons learned.

The Trust has continued to have separate targets applied in the East and West for *Clostridium difficile* for the year 2014-15. The *C difficile* target for the East was no more than 2 cases and for the West no more than 4 cases where a lapse in care had been identified to have caused the *C difficile* infection. Seven cases were identified for the in-patient units in 2014-15 in the West but no lapses in care were identified therefore these were not attributed to the trust. One patient was identified in the East within 24 hours of admission from the acute trust. This case was not counted against BHFT target as the patient had been admitted for less than 48 hours. A Root Cause Analysis (RCA) was undertaken for all cases. A summary of RCAs is included in Appendix 2.

The targets for 2015-16 will remain at no more than 2 cases for the East and 4 cases for the West.

Meticillin Resistant *Staphylococcus aureus* (MRSA)

The guidance on the reporting and monitoring arrangements and post infection review process for MRSA bloodstream infections from April 2014 (version 2) first published: April 2013 has been updated. The purpose of this guidance is to support commissioners and providers of care to deliver zero tolerance on MRSA bloodstream infections, as set out in the planning guidance 'Everyone counts': Planning for Patients 2013/14. An amendment now allows for the assignment of a case of MRSA bloodstream infection to a "Third Party" through the arbitration process lead by the Regional Director of Nursing or the Regional Medical Director (or their designated nominees). Previously MRSA bloodstream infections could only be assigned to an Acute Trust or CCG.

BHFT have been involved in 3 PIRs where patients have received services from the trust. All three cases were assigned to the CCG. A summary of the post infection reviews is included in Appendix 2.

The trust target for 2014-15 was no cases of MRSA bacteraemia within the inpatient units, in line with the national target of 'zero tolerance' to MRSA bacteraemia.

MRSA admission screening is undertaken as per national guidance. This has been monitored by the IPCT across the inpatient units quarterly during 2014-15.

Meticillin Sensitive *Staphylococcus aureus* (MSSA)

There have been no Meticillin Sensitive *Staphylococcus aureus* (MSSA) bacteraemia identified in 2014-15 for the in-patient units.

***Escherichia coli* Bacteraemia**

A total of 6 cases of *E coli* bacteraemia were reported during 2014-15 related to the in-patient units. An RCA was undertaken for all cases, a summary is included in Appendix 2.

Glycopeptide Resistant Enterococci (GRE)

There was no GRE bacteraemia infections reported for Community Health Services under the mandatory reporting scheme.

Other non-reportable bacteraemia

During 2014-15 two inpatients developed a non-reportable bacteraemia, one was associated with a *Streptococcus galolyticus* and the other a *Klebsiella pneumonia* infection. An RCA was undertaken for both cases in order to identify and share learning.

Carbapenemase - Producing Enterobacteriaceae (CPE)

Enterobacteriaceae are bacteria that live in the gut of humans and animals. These organisms are common causes of opportunistic urinary tract infections, intra-abdominal and bloodstream infections. Carbapenems are antibiotics normally reserved for serious infections caused by drug-resistant Gram-negative bacteria (including Enterobacteriaceae). Carbapenemases are enzymes that destroy carbapenem antibiotics, conferring resistance. They are made by a small but growing number of Enterobacteriaceae strains. In December 2013 Health Protection England released a toolkit for acute trusts to support them in identification and management of affected patients.

A patient was confirmed as having CPE in his urine culture. The patient and associated contacts was managed following national guidance.

Outbreak Reports

There were 13 outbreaks of gastroenteritis reported from inpatient areas within BHFT during 2014-15. Refer to Appendix 2 for summary table. The outbreaks were managed and investigated by the IPCT. It was not possible to identify the source of infection in the outbreaks and it is acknowledged in the Health & Social Care Act 2008 that occasionally outbreaks of viral infections circulating in the wider community will inevitable cause outbreaks in institutional settings e.g. hospital wards. An outbreak is defined as two or more cases of diarrhoea and or vomiting where an infectious cause is suspected occurring in a hospital ward without laboratory confirmation.

Incidents

In addition to the outbreaks of gastroenteritis, alert organism surveillance and associated RCAs the team has been involved in managing and/or supporting the following incidents:

- Whooping Cough, Community Nursing, Windsor
- iGAS Community Nursing, Bracknell
- Tuberculosis Community Mental Health Team, Slough
- Periods of Increased Incidence (PII) - Highclere Ward, West Berkshire Community Hospital & Ascot/Windsor Ward, Wokingham
- Norovirus (single case) – Donnington Ward, West Berks Community Hospital
- Tuberculosis Community Learning Disability Team, Bracknell
- Diarrhoea and vomiting Henry Tudor Ward & Jubilee Ward – non outbreak
- Possible Tuberculosis Community Mental Health, Slough
- Loss of Water Supply to Part of Upton Hospital Site
- Listeria bacteraemia, Oakwood/RBFT
- Mumps exposure (staff member)
- Loss of water supply Milman Road Clinic
- D&V Kiddies Cabin day nursery, St Marks Hospital
- CPE contacts and transfer to BHFT inpatient units
- Tuberculosis Rose Ward
- Loss of infection prevention & control information from the intranet
- E coli bacteraemia identified on transfer in, Jubilee Ward
- Gastroenteritis Outbreak Jack in the Box Nursery, Upton Hospital
- Single case of Norovirus, Donnington Ward, WBCH
- Cluster of patients with E coli urine infection, Donnington, WBCH
- Cluster of ESBL cases Ascot Ward, Wokingham Hospital
- Exposure to chicken pox of a non-immune clinical member of staff
- Shingles Ascot Ward
- Tuberculosis patient Skimped Hill Health Centre
- E Coli bacteraemia, Westcall and Wokingham Community Nursing

Shared Learning

When a patient develops a significant infection, an investigation is undertaken and a root cause analysis report is produced. These documents identify risk factors, likely causes for the infection and other learning which may not be a cause of the infection but have been identified as an area for improvement as part of the RCA process. A quarterly summary of lessons learned and necessary actions are disseminated across the organisation in order to prevent re-occurrence. A quarterly report of the IPC incidents reported via Datix is also produced and shared across the organisation. These reports along with the full RCAs are also available on Teamnet.

Emergency Planning

Following increasing national concern about the Ebola outbreak in West Africa, the trust, along with other organisations, developed emergency plans in the unlikely event of a patient presenting with Ebola in the UK. Whilst the likelihood of a patient presenting with Ebola is very low, preparation plans have been developed and information provided to support services identified as most likely to see a presenting patient. PPE training has been also been provided. Two table top exercises were held to test out the trust's plans. An Ebola session including PPE was included on the IPC study day in November 2014. An Ebola page is available on Teamnet.

Hand Hygiene

Hand Hygiene is monitored through the monthly Hand Hygiene Observations for all inpatient units and quarterly in other departments. Non-compliance is dealt with locally at time of audit through the production of action plans and through on-going observational monitoring. Data is included in the monthly reports and discussed/reviewed at Locality Patient Safety and Quality Meetings, Infection Prevention & Control Working Groups and the Infection Prevention & Control Strategic Group. Reports are available on the IPC pages of Teamnet.

A review of the frequency of monitoring in non-in-patient services was undertaken in 2014-15 and a decision to continue with quarterly was made following feedback from services and the IPCWGs.

Link Practitioner Programme

The Link Practitioner Group have continued to meet quarterly and are provided with an education programme by the infection prevention and control team which includes audit feedback, general update including compliance with the infection prevention control annual programme and other topical issues. The group met in June, September 2014 and February 2015. In November 2014 the IPCT organised a full study day at Easthampstead Baptist Church. The venue's capacity enabled the team to extend the day to non-Link Practitioners. The day was attended by 40 staff and evaluated well.

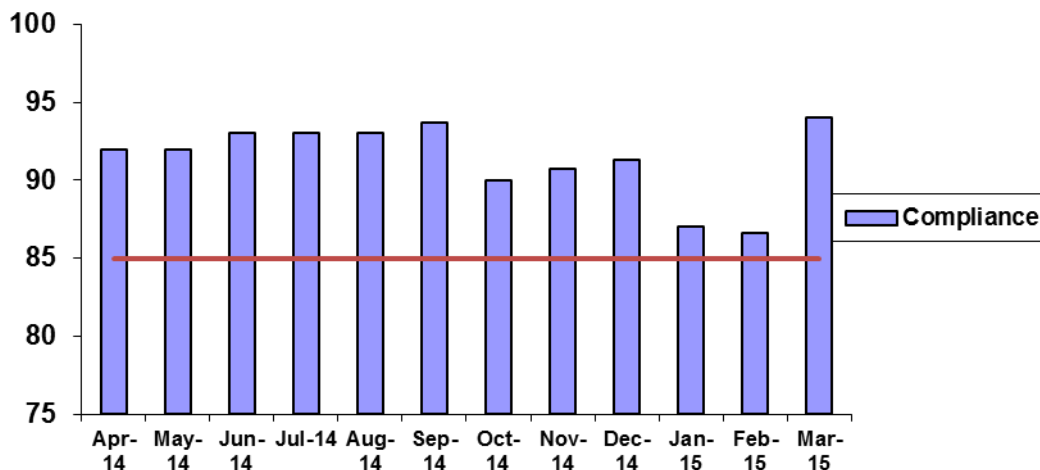
Educational Activities

Infection prevention and control mandatory training requirements are outlined within the statutory, mandatory and essential training framework. Infection prevention and control training is included within the BHFT induction and general mandatory update programmes. Update sessions are also provided by the team across all main sites within the Trust as per a prearranged programme. In addition bespoke/department training sessions have been arranged with the team. Targeted sessions have also been provided in reaction to seasonal issues such as increasing incidence of norovirus in the community.

End of year training figures:

At the end of March 2015 the organisation compliance with infection control mandatory training stood at 94%.

Overall Trust Infection Prevention & Control Training Compliance as at 31st March 2015



Due to the increased risk of cross infection associated with the inpatient wards infection prevention & control training compliance has been monitored monthly for these areas.

Infection, prevention & control training will continue to be monitored at board level in 2015-16 in order to ensure that compliance with attendance improves / is maintained.

Audit Activity

For 2014-15 an audit programme and a separate monitoring programme were set. This change was introduced in 2013-14 and will be continued for 2015-16. The programmes for 2015-16 can be found in appendix 1.

The following audits were undertaken:

- Audit of dental services - Decontamination of Medical Devices
- Antibiotic audit – Inpatient Units
- Urinary catheter bundle audit – Community Services
- Enteral feeding audit – Community Services
- Management of sharps audit – Inpatient and Community Services

The following monitoring was undertaken:

- Hand Hygiene Observations – monthly for in-patient units and quarterly for other services
- On-site Laundry - Upton & St Marks Hospitals
- Linen Handling & Disposal – inpatient units
- Standard Precautions – inpatient units
- Patient Equipment - Inpatient Units, Community Teams
- Inter-healthcare Transfer Forms – inpatient units
- Static Mattresses – inpatient units
- Isolation Facilities – inpatient units
- MRSA screening – inpatient units

Non-compliance is dealt with locally at time of data collection through the production of action plans which are monitored at local level. Reports are discussed / reviewed at Locality Patient Safety and Quality Meetings, Infection Prevention & Control Working Groups and the Infection Prevention & Control Strategic Group. Further details, including the full reports are available on the IPC pages of Teamnet.

In addition to the audit and monitoring work described above the team aim to visit the in-patient wards monthly to spot check against key issues such as cleanliness of the environment and equipment, sharps management, standard precautions and compliance with infection prevention and control practices.

Antibiotic Stewardship

A review of the trust's approach to antimicrobial stewardship was undertaken using a self-assessment tool designed for community hospitals. An action plan was developed to address the identified gaps. The pharmacy department were successful in securing funding for this through a project bid to the Patient Safety Federation.

An audit of compliance with the BHFT Antibiotic Guidelines was undertaken on all the wards across the trust in February 2015 by the Pharmacy Department. The report was reviewed at Infection Prevention & Control Strategic Group in April 2015 prior to the forthcoming DTC meeting in May. The results will be discussed at ward training sessions and be presented at the Westcall doctors meeting in May.

The IPCT worked collaboratively with pharmacy to support the European Antibiotic Awareness Day 2014 with promotional stands at all inpatient sites for that week.

Infection Prevention and Control Policies

The following policies have been reviewed:

ICC002	Hand Hygiene
ICC003	Standard Precautions and use of Personal Protective Equipment (PPE)
ICC005	Management of Needle sticks and Contamination Injuries
ICC005b	Management of Sharps
ICC009	Blood and Body Fluid Spillage Policy
ICC010	Specimen Collection and Transportation
ICC014	Antibiotic Prescribing Guidelines
ICC015	Clostridium Difficile
ICC017	Isolation and Movement of Patients
ICC018	Aseptic Non-Touch Technique Policy
ICC024	Care and Management of Mattresses in Inpatient Areas
ICC025	Chickenpox / VZV Policy

The following new policies were developed:

ICC028	Healthcare Workers with Communicable Infections
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The Infection Prevention and Control Team also provide specialist infection control input to other clinical and environmental policies as required.

Decontamination

The decontamination contract awarded to Nuffield Health in 2014 has worked well with very few compliance issues none of which have related to failure or deficiencies in decontamination.

The contract for mattress decontamination is due for review. This has been extended for 6 months whilst discussions are undertaken to agree the most appropriate way forward for dynamic mattresses across the trust.

The dental services continue to undertake decontamination in house. Dental staff, continue to ensure safe practice within their clinics through agreed procedures. The Best Practice Decontamination Plan has been revisited and updated in preparation for a date being issued for compliance. No date for this has been issued to date.

A review of the use of cleaning wipes / disinfectants across the trust has been undertaken in order to reduce the variety of and standardise the products being used.

Service Level Agreements (SLA)

Provision of professional advice and direction by the Consultant Microbiologist, Frimley Health NHS Foundation Trust on matters relating to infection control has continued throughout the year. The Service Level Agreement was last reviewed and updated in March 2012. This has been reviewed for 2015-16.

The SLA with Sue Ryder has continued to cover any reactive work relating to the Duchess of Kent Hospice. This will reviewed in 2015-16.

Committee/Group Membership

Infection Prevention & Control Strategic Group
Infection Prevention & Control Working Groups (East & West localities)
Operational Facilities Review Group (Non PFI sites)
ISS Liaison Meetings, Prospect Park
Link Practitioner Group
Policy Scrutiny Group
Waste Working Group
Medical Devices Group
Medicines Management Group
Frimley Health formerly Heatherwood and Wexham Park NHS Foundation Trust
Infection Control Committee
Royal Berkshire NHS Foundation Trust Infection Control Committee
Thames Valley Infection Prevention Group
Prospect Park Health & Safety Group
Operational Facilities Meetings (WBCH Hospitals)
PLACE Meetings
Community Ward Performance and Improvement Group

Other Activities

The IPCT have also been involved in:

- Providing advice on building projects and reconfiguration of services
- Poster Presentations at regional and national conferences
- Development of Infection prevention & control on Teamnet

Appendix 1 Infection Prevention and Control Annual Programme 2015-16

criteria	What a service provider will need to demonstrate	Action required	Responsibility	Progress	Completion date
1	Systems to manage and monitor the prevention and control of infection. These systems use risk assessments and consider how susceptible service users are and any risks that their environment and other users may pose to them	Designation of an individual to be the lead for infection prevention and control (DIPC)	CEO		April 2015
		Development of Annual IPC and audit/monitoring programmes that are approved by the Trust Board	DIPC		April 2015
		Review of all existing policies and production of new policies as required ensuring in date. (see criterion 9)	HIPCs		In line with policy programme Mar 16
		Compliance with policies to be monitored through the infection prevention and control audit/monitoring programme.	HIPCs		Mar 16 with progress quarterly monthly at IPSC
		Antibiotic audit	Chief Pharmacist		March 2016
		review of organisation through use of SHA antibiotic self-assessment for community hospitals	Chief Pharmacist / Medical Director	Review completed, action plan in progress	March 2016

		Monitoring of compliance with MRSA admission screening and reporting to IPCWGs	HIPCs		Jun 15 Sep 15 Dec 15 Mar 16
		Designation of a lead for cleaning and decontamination	CEO		April 2015
		Production of a DIPC Infection control annual report for the Board which is released publically.	DIPC		July 2015
		Quarterly IPC reports presented to the Board	Deputy Director of Nursing		Quarterly
		Preparation of monthly and quarterly reports for presentation to the Board	HIPCs		Monthly & Quarterly
		Temporary and contract staff have infection control included in local induction or commencing first/single shift within the trust.	All Services		Apr 15 and ongoing
		Monitoring of external linen contract	Director of Estates & Facilities		March 2016
		Addition of respite units to the existing BHFT external linen contract	Specialist Children's Services Manager	Under review	Carried over from September 14
		Production of surveillance data to be presented to the Board	HIPCs		Quarterly
		Work collaboratively with the CCG's HPE and local healthcare providers including	HIPCs		March 2016

		attendance at Local Health Economy meetings			and Ongoing
		Shared learning from infection control incidents and root cause analysis to be disseminated to relevant services within BHFT	HIPCs		Quarterly
		Review of new national initiatives prior to adoption by the trust	HIPCs		When released
2	Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections	IPCT are consulted when external or internal contracts are being prepared.	Director of Estates & Facilities		On-going
		IPCT included in on-going plans for service redevelopment	Director of Estates & Facilities		On-going
		Staff are trained in cleaning and decontamination processes and hold appropriate competences for their role.	Heads of Service		Mar 16
		Decontamination of reusable medical devices takes place in appropriate facilities designed to minimise the risks that are present. Implementation of best practice requirements as set out in HTM 01-05 when date for implementation is issued.	Head of Service, Dental		Mar 16 subject to date being issued
3	Provide suitable accurate information on infections to service users and their visitors	Development of IPC information available on both the internet sites for the general public.	Head of Communication		March 16
		Provision of information on reporting failures in hygiene and cleanliness for	Head of Operation		September 14

		patients and visitors	Facilities		
		Continuation of development of the IPC page on Teamnet	HIPCs		March 16
4	Provide suitable and accurate information on infections to any person concerned with providing further support or nursing/medical care in a timely fashion.	Compliance to be monitored through the transfer form spot check in accordance with the annual monitoring programme.	HIPCs		September 15
5	Ensure that people who have or develop an infection are identified promptly and receive the appropriate treatment and care to reduce the risk of passing on the infection to other people.	Prompt identification of alert organisms via available surveillance systems and liaison with clinical teams. Flagging of Infection risks (when known) on Rio	IPCT		Apr 15 and ongoing
		Undertaking of RCAs/PIRs and investigation of bacteraemias, C difficile and other significant organisms	HIPCs		Apr 15 and ongoing
		Dissemination and sharing of learning from outbreaks, incidents and RCA's	Locality Clinical Directors		Apr 15 and ongoing
		Surveillance information shared with relevant teams and reported to relevant groups (e.g. IPCWG).	HIPCs		Quarterly to IPCWGs
		Development of IT systems to improve the timeliness of identification of alert organisms and subsequent management	HIPCs		Mar 16
		Advice sought from relevant parties as required i.e. Microbiologists/CCDC/ Infection Control Doctor.	HIPCs / Ward/dept Managers		When required

		Training on the use of antimicrobial drugs provided to medical staff, non-medical prescribers and staff who administer antimicrobial drugs – Defined staff group to be included in action plan to be agreed following ratification of e learning module. (IPCSG 28.01.15)	Chief Pharmacist		March 2015 & ongoing
6	Ensure that all staff and those employed to provide care in all settings are fully involved in the process of preventing and controlling infection.	Development of focussed promotion weeks (or months) in order to raise awareness amongst staff	HIPCs		March 16
		Audits undertaken as per the IPC audit programme and reported to the IPCSG via IPCWG.	HIPCs		March 2016
		Local action plans developed following audit, disseminated by ward / team leaders and documented in minutes of team meetings	Ward / dept managers		Within 1 month of receiving the audit report / feedback
		Monitoring undertaken as per the IPC monitoring programme and reported to the IPCSG via the IPCWG	HIPCs		March 2016
		Immediate action to be taken to correct deficiencies following feedback from ward spot checks	Ward / dept managers		Within 2 days of feedback
		Continued involvement and attendance at the Thames Valley Infection Prevention Network in order to facilitate collaborative working	HIPCs		March 2016 and on-going

		Continuation of development of the update section and discussion forum within the IPC page on Teamnet.	HIPCs		March 2016 and ongoing
7	Provide or secure adequate isolation facilities	Isolation monitoring to be performed as per the monitoring programme.	HIPCs		March 2016
8	Secure adequate access to laboratory support as appropriate	SLA agreements in West and East Berkshire.	Head of Contracting		March 16
		Development of IT systems to improve the quality of surveillance information received from the laboratories	HIPCs		March 15 & ongoing (carried over from 2012-13, 2013-14, 2014-15)
9	Have and adhere to policies, designed for the individuals care and provider organisations, that will help to prevent and control infections	Existing policies reviewed as per 2 yearly programme or when required if sooner	HIPCs		Apr 15 and ongoing
		Development guidelines for emerging organisms,	HIPCs		Mar 16 and ongoing
10	Ensure, so far as is reasonably practicable, that care workers are free of and are protected from exposure of infections that can be caught at work and that all staff are suitably educated in the prevention and control of infection associated with the provision of healthcare.	Programme of on-going education for staff.	HIPCs		On-going
		Review content of face to face training and assessment tools	HIPCs		June 15

		All staff attend training as per the requirements of the Statutory, Mandatory & Essential Training Framework.	Locality Directors		April 2015 and on-going
		Occupational Health Contractor to keep a record relevant immunisations of all staff	Director of HR		March 15 & ongoing (carried over from 2013-14, 2014-15)
		Occupational health policies on the prevention and management of communicable infections in health care workers are in place.	Director of HR	Policies in place, for two yearly review	March 2016

Glossary of abbreviation

CEO	Chief Executive Officer
DIPC	Director of Infection Prevention & Control
HIPC	Head of Infection Prevention & Control
IPCWG	Infection Prevention & Control Working Group
IPCSG	Infection Prevention & Control Strategic Group
IPCT	Infection Prevention & Control Team
SECEG	Safety Experience and Clinical Effectiveness Group
CCDC	Consultant in Communicable Disease Control

BHFT Infection Prevention and Control Annual Audit Programme 2015-16

Month	Audit description	Location of audit	Undertaken by	Progress
Q1	Hand Hygiene Facilities	In-patient Units	IPCT	
Q1	Urinary catheters/pathway	In-patient Units	IPCT	
Q2	Enteral feeding	All In-patient Sites	Dietetic team	
October 2015	Management of medical devices	Dental	Dental teams	
TBA	Antibiotic audit	All inpatient wards	Pharmacy leads	
November 2015	IV Therapy	IV clinics	TBC	
January 2016	Sharps management	Inpatient and outpatient services	All clinical services	

BHFT Infection Prevention and Control Annual Monitoring Programme 2015-16

Month	Description of monitoring	Location	Undertaken by	Progress
April	Hand hygiene observational check	All wards	Ward staff	
May	Hand hygiene observational check	All wards	Ward staff	
	Linen handling and disposal	In-patient units	IPCT	
	Transfer forms	In-patient units	IPCT	
June	Hand hygiene observational check	All services	All services	

Month	Description of monitoring	Location	Undertaken by	Progress
	MRSA screening	In patient wards	IPCT	
	Static Mattresses and cushions	All inpatient sites	Ward staff	
July	Hand hygiene observational check	All wards	Ward staff	
	Standard precautions (PPE)	All inpatient units	IPCT	
August	Hand hygiene observational check	All wards	Ward staff	
September	Hand hygiene observational check	All services	All services	
	MRSA screening	In patient wards	IPCT	
October	Hand hygiene observational check	All wards	Ward staff	
	Patient equipment	Specialist services	All services	
November	Hand hygiene observational check	All wards	Ward staff	
December	Hand hygiene observational check	All services	All services	
	MRSA screening	In patient wards	IPCT	
January	Hand hygiene observational check	All wards	Ward staff	
	Isolation facilities	All inpatient wards	IPCT	
February	Hand hygiene observational check	All wards	Ward staff	
March	Hand hygiene observational check	All services	All services	
	MRSA screening	In patient wards	IPCT	

Appendix 2 – Summary of Surveillance Data 2014-15

Introduction

A healthcare associated infection (HCAI) can be defined as an infection resulting from medical care or treatment in hospital (in- or out-patient), nursing homes, or even the patient's own home. (Public Health England 2013)

Previously known as 'Hospital Acquired Infection' or 'Nosocomial Infection', the current term reflects the fact that a great deal of healthcare is now performed outside the hospital setting. Surveillance is an essential part in the role of the Infection Prevention and Control Team (IPCT) in order to identify and manage and where possible prevent infection in high risk patients both in inpatient settings and patients receiving care in their own homes.

There is a national mandatory requirement for trusts to report all cases of *Clostridium difficile* infection, MRSA, MSSA, *Escherichia coli* and GRE bacteraemia to Public Health England. BHFT also undertake enhanced surveillance of all bacteraemia identified at Acute Trusts where patients have been transferred from BHFT inpatient units or where patients have received care from BHFT community services. This is to identify any issues or good practice and promote shared learning between clinical teams.

***Clostridium difficile*:**

Clostridium difficile infection is the most commonly diagnosed bacterial cause of healthcare-associated diarrhoea. *Clostridium difficile* is an anaerobic bacterium that is present in the gut of up to 3% of healthy adults and 66% of infants. However, *Clostridium difficile* rarely causes problems in children or healthy adults, as it is kept under control by the normal bacterial population of the intestine. *Clostridium difficile* Infection (CDI) occurs when certain antibiotics disturb the balance of bacteria in the gut allowing *Clostridium difficile* to multiply rapidly, producing toxins A and B which cause illness which often manifests as diarrhoea and colitis.

The risk for disease increases in patients with the following: (DH 2008)

- antibiotic exposure
- gastrointestinal surgery/manipulation
- long length of stay in healthcare settings
- a serious underlying illness
- immunocompromising conditions
- advanced age

Most patients only develop a mild illness and stopping the antibiotic(s) together with fluid replacement to re-hydrate patients usually results in rapid improvement. However there are some strains that carry a specific hypervirulent gene (type 027, 078). These tend to manifest in greater proportion of severe disease and appear to have a higher mortality

Definitions:

Clostridium difficile Infection is the major cause of antibiotic-associated diarrhoea and colitis; it is a healthcare associated intestinal infection that should be considered a diagnosis in its own right (DH 2008).

For management and identifying incidents of CDI the following definitions should be used:

***Clostridium difficile* Infection (CDI):**

One episode of diarrhoea, defined on Bristol Stool Chart 5-7 that is not attributable to any other cause, including medicines, and occurs at the same time as a positive toxin assay (with

a positive *C. difficile* culture) and or endoscopic evidence of pseudomembranous colitis (DH/HPA 2012).

A Period of Increased Incidence (PII) of CDI:

Two or more new cases occurring >48 hours post admission, not a relapse in a 28-day period on a ward. (DH 2008)

An outbreak of *Clostridium difficile* Infection (CDI):

Two or more cases caused by the same strain related in time and place over a defined period that is based on the date of onset of the first case. (DH, 2008)

Non reportable cases

In January 2012, the Department of Health issued guidance on the testing and definition of reportable cases of *C difficile* in order to standardise practice in all Trusts. The laboratories at Frimley Health (Wexham Park Hospital) and the Royal Berkshire NHS Foundation Trusts have implemented this reporting system since February 2012.

***Clostridium difficile* trajectories**

For 2014/15, organisations were encouraged to assess each CDI case they identify to determine whether the case was linked with a lapse in the quality of care provided to patients. This will increase the organisation’s understanding of the quality of the care they are providing and highlight areas where care could be improved. The Co-ordinating Commissioner under each commissioning contract will be able to consider the results of these assessments and exercise discretion in deciding whether any individual case of *C. difficile* affecting a patient under its contract should count towards the aggregate number of cases on the basis of which contractual sanctions are calculated. Where CDI cases are not linked with identifiable lapses in care, it is proposed that those cases are not considered when contractual sanctions are being calculated.

In January 2015, NHS England published infection objectives for NHS organisations in 2015/16 and guidance on sanction implementation for *Clostridium difficile*. This guidance has been reviewed by the IPCT and further guidance on assessing lapses in care has been incorporated into the BHFT and local health economy Investigation tool.

Summary of *Clostridium difficile* cases BHFT inpatients April 2014 – March 2015:

Reportable cases:

Case	Date	Location	Patient summary	Avoidable	Lapse in care identified
1	06.05.14	Highclere Ward, WBCH	The likely causes of the patient’s <i>C difficile</i> infection were the PPI therapy and antibiotics prescribed for cellulitis and UTI. The antibiotics were in-line with antibiotic prescribing guidelines	No	No
2	19.05.14	Windsor Ward, Wokingham Hospital	This investigation identified some contributory factors but, the likely cause of the patient’s <i>C. difficile</i> infection was antibiotic prescribed for	No	No

Case	Date	Location	Patient summary	Avoidable	Lapse in care identified
			Community Acquired Pneumonia. The antibiotic was in line with the antibiotic prescribing guidelines		
3	11.06.14	Ascot Ward, Wokingham Hospital	Previously positive (April 2014) Had recent antibiotics for treatment of sepsis. Microbiologist advised to obtain further specimen.	No	No
4	23.06.14	Ascot Ward, Wokingham Hospital	Previously positive (non reportable) Continual symptoms, medical team discussed management with microbiologist and repeat specimen requested and obtained.	No	No
5	07.07.14	Oakwood Unit PPH	The most likely cause of this patients Clostridium difficile infection was ongoing symptoms from a previously identified C difficile infection with a recent use of aperients, antibiotic history and PPI medication.	No	No
6	16.09.15	Oakwood Unit PPH	The most likely causes of C difficile infection were ongoing symptoms from a previously identified C difficile infection and recent antibiotic therapy for treatment of Urinary Tract Infection (UTI) and Hospital Acquired Pneumonia (HAP).	No	No
7	19.11.14	Ascot Ward Wokingham Hospital	Patient commenced on oral amoxicillin for treatment of a chest infection, which was the likely trigger for the Clostridium difficile positive result identified	No	No

Following investigation of reportable *Clostridium difficile* cases in BHFT inpatient units all 7 cases were deemed as 'no lapse in care identified'. In all cases the patients had a number of predisposing risk factors and all cases identified had received recent antimicrobial therapy which was in line with prescribing guidelines.

Lessons learned from CDI investigations:

Identification of a delay in staff sending specimen to identify the source of infection
 Staff to be aware of need to isolate patients based on clinical symptoms of diarrhoea.
 Staff to ensure that a medical review is arranged as soon as possible when patients become symptomatic

Communication regarding specimen collection, responsibilities for checking of results or delay in results and appropriate actions is essential for all staff.

Requirement for accurate documentation on fluid balance and stool charts by staff

Summary of Non reportable *Clostridium difficile* cases April 2014 – March 2015:

Case	Date	Location	Patient summary	Avoidable	Lapse in care identified
1	11.04.14	Highclere Ward, WBCH	Pre 72 hour case. Patient was transferred from Great Western Hospital, Swindon on 10.04.14 The likely cause of the patient's C. difficile infection was the flucloxacillin prescribed for infection in their leg wound. This was in-line with the antibiotic prescribing guidelines	No	No
2	27.05.14	Windsor Ward	The most likely cause of the C difficile infection was the recent course of flucloxacillin for cellulitis of hip wound. The dose was higher than recommended in guidelines, this may have been clinical judgement when assessing the cellulitis however rationale for dose was not documented, and therefore it has not been possible to classify this infection as unavoidable.	No	Not determined
3	06.06.14	Windsor Ward	The likely cause of the patients C.difficile was recent antibiotic therapy for urinary tract infections and a recent history of norovirus.	No	No
4	26.10.14	Oakwood PPH	The most likely causes of onset of C difficile was recent antimicrobial therapy. Patient symptoms resolved after 72 hours.	No	No

Period of increased incidence (PII) 2014-15

During 2015-16, two separate periods of increased incidence were identified within BHFT inpatient units. PII audits were commenced on a weekly basis which included patient management, adherence to standard precautions, isolation precautions and environmental cleanliness.

Wokingham Hospital:

During April – June 2014, 7 cases of *Clostridium difficile* were identified from patients in Windsor and Ascot Ward at Wokingham Hospital.

Two cases were identified as positive at RBFT prior to transfer to Wokingham Hospital.

Three cases were classed as reportable.

Two cases were classed as non-reportable.

In 2 cases, repeat specimens were requested by the Microbiologist from previously identified positive *C. difficile* patients.

During this time Windsor Ward patients were transferred to Ascot Ward to allow for planned estates work to commence.

Risk assessment of which patients required single rooms was undertaken. Priority was given to symptomatic known cases of *Clostridium difficile*.

Liaison with the ward staff and IPCT continued on a daily basis regarding symptomatic patients. The IPCT reviewed and undertook investigations on all identified cases

Following discussion and review of all information as detailed in this report with the Consultant Microbiologist (including inherited cases, compliance with PII audits, environmental cleaning and detailed review of patient position, ribotyping and potential cross transmission), the number of *Clostridium difficile* cases on Ascot ward can be defined as a cluster of sporadic cases rather than an outbreak.

However, it is difficult to determine whether transmission would still have been possible between the patients displaying the same ribotypes and therefore potentially linked. (Two patients were ribotype 002 and two patients were ribotype 056).

No lapse in care was identified in the 3 reportable cases identified from Ascot Ward. Three different ribotypes were identified in these cases

West Berkshire Community Hospital:

The IPCT were made aware of 2 cases of *Clostridium difficile* on Highclere during May-June 2014. One case identified as toxin producing *C. difficile* therefore was reportable and the second case was a non-reportable case identified by PCR. As both cases were within a 28 day period, the ward was placed on a Period of Increased Incidence (PII).

Following the receipt of 3 consecutive PII audits above 90% and no further patients reporting *C.difficile* the Period of Increased Incidence was concluded.

Bacteraemia

MRSA Zero tolerance:

The guidance on the reporting and monitoring arrangements and post infection review process for MRSA bloodstream infections was updated from April 2014 (version 2) - first published: April 2013 (version 1).

The purpose of this guidance is to support commissioners and providers of care to deliver zero tolerance on MRSA bloodstream infections, as set out in the planning guidance 'Everyone counts': Planning for Patients 2013/14.

An amendment now allows for the assignment of a case of MRSA bloodstream infection to a "Third Party" through the arbitration process lead by the Regional Director of Nursing or the Regional Medical Director (or their designated nominees). Previously MRSA bloodstream infections could only be assigned to an Acute Trust or CCG.

MRSA bacteraemia:

Three cases of MRSA bacteraemia have been identified in patients receiving BHFT community services alongside other healthcare agencies.

Case	Date	Location	Patient summary	Assigned to:
1	29/08/2015	Bracknell community	Patient identified as having an MRSA bacteraemia within 48 hours of admission to Frimley Park Hospital. The community nurses were involved with the care of the patient's leg ulcers. The patient was non-compliant with advice given and frequently removed or adjusted their dressings. The patient was not known to be previously MRSA positive.	Bracknell & Ascot CCG
2	28/10/2015	Slough community	Patient, identified as having an MRSA bacteraemia within 48 hours of admission to Wexham Park Hospital. The patient had input from the district nursing service for care of a wound on their elbow. Patient refused to get out of bed for dressing of wound and was reluctant to be compliant with advice given on care of elbow, which was found to be colonised with MRSA at same time as positive blood culture.	Slough CCG
3	15/02/2015	Wokingham Community	Patient identified as having an MRSA bacteraemia on admission to RBFT. The patient was having palliative chemotherapy at RBFT and the district nursing team were providing care for their PICC line. Patient had history of recurrent pleural infusions and chest infections which was thought to be the source of the bacteraemia. Patient was known to be MRSA positive but this had not been communicated to the district nurses by either the GP or RBFT.	Wokingham CCG

MSSA/ Glycopeptide Resistant Enterococci (GRE) bacteraemia:

No cases of MSSA or GRE BSI reported from inpatient units or enhanced surveillance (West) in patients who have received BHFT community service input.

Escherichia coli:

In the following cases, blood cultures were taken in A&E at the acute Trust following transfer from BHFT inpatient units.

Patients identified with positive blood culture who have recently been discharged from BHFT inpatient services or community patients who have been identified as part of the enhanced surveillance to have had relevant community service input are also investigated and where issues are identified, learning is shared with the clinical teams.

Summary of E Coli bacteraemia cases:

Case	Date	Location	Patient summary
1	April 2014	Patient transferred from Donnington Ward to RBFT	The colonised urinary tract was the focal point of bacteraemia as a separate urine culture on 9 th April 2014 confirmed <i>E. coli</i>
2	June 2014	Patient transferred from Charles Ward to RBFT on 21.06.15	From the information available the most likely source of the bacteraemia was the urine that had been previously identified as <i>E. coli</i> positive
3	August 2014	Patient transferred from Donnington Ward to RBFT	The patient's urinary tract was colonised with <i>Escherichia coli</i> and he had multiple admissions in May, June and July to acute hospitals both in the UK and USA due to sepsis associated with <i>Escherichia coli</i> .
4	September 2014	Patient transferred from Ascot Ward to Acute Trust	The most likely source of the bacteraemia was the urinary tract previously colonised with <i>Escherichia coli</i> .
5	January 2015	Patient transferred from Ascot Ward to RBFT	The most likely cause of the bacteraemia was colonisation in the urine leading to urinary tract infection resulting in sepsis
6	January 2015	Patient transferred from Ascot Ward to RBFT	The most likely source of the bacteraemia was the colonised urinary tract with <i>E. coli</i> .
7	March 2015	Patient admitted from home to acute Trust	The most likely source of the bacteraemia was the colonised urinary tract with <i>E. coli</i> .

Lessons learned:

Documentation regarding rationale for anti-microbial prescribing must be recorded.

Documentation of rationale for catheter insertion and continuation must be recorded. The frequency of how often this should be reviewed is to be agreed. The catheter care pathway is being updated in accordance with the EPIC3 guidelines.

Early sepsis recognition management is to be agreed and consistent across BHFT services.

Summary

In all 6 cases where patients had been transferred to the acute Trust, *E coli* were identified in urine cultures and were the main cause of the development of bacteraemia. Urinary catheterisation has been identified as a major risk factor. Targeted training, review of documentation related to catheter care and review of early sepsis recognition toolkits have been implemented.

Summary of gastroenteritis outbreaks:

Month/year	Ward/site	No. of Patients affected	No. of Staff affected	Total No. patient Specimens	No. of positive results for Norovirus	No of days admissions restricted
April 2014	Donnington Ward, WBCH	7	1	2	1	7
April 2014	Oakwood, PPH	13	10	1	1	11
May 2014	Henry Tudor Ward, SMH	14	5	6	5	8
October 2014	Rowan, PPH	4	3	0	0	3
October 2014	Oakwood, PPH	9	1	0	0	4
November 2014	Oakwood, PPH	4	0	1	0	0
January 2015	Highclere Ward, WBCH	7	1	4	3	9
February 2015	Highclere Ward, WBCH	3	0	3	1	2
February 2015	Henry Tudor Ward, SMH	4	2	2*	0	4
February 2015	Donnington Ward, WBCH	11	8	5	5	10
March 2015	Henry Tudor Ward, SMH	16	2	3	1	14
March 2015	Rowan Ward, PPH	11	7	3	3	8
March 2015	Oakwood, PPH	13	0	3	3	4

*One of the two specimens was positive for Rotavirus

Next steps:

Surveillance systems

The IPCT are working to implement ICNet surveillance system in East as in the West in order to provide equity in surveillance in inpatient and community patients receiving care from BHFT services and ensure timely shared learning.

The undertaking of enhanced surveillance is reliant on timely data being provided from Acute Trusts in East and West localities

Clostridium difficile investigations

The investigation tool has been updated to reflect the guidance issued in the 2015-16 sanctions guidance issued by NHS England. This document is being reviewed by the Berkshire West Health Economy Clostridium difficile Group in the aim for the Acute Trust, BHFT and Berkshire West CCG to use the same tool to provide consistency when reviewing cases in order to determine whether a lapse in care has been identified. A similar meeting has not yet been set up in the East due to no cases being identified in BHFT East inpatient units.

Sepsis early recognition

Following the Patient Safety Alert 'Resources to support the prompt recognition of sepsis and the rapid initiation of treatment' 2nd September 2014, BHFT is currently reviewing the toolkits used for sepsis recognition. This review includes inpatient and out of hours GP services.

The current Bloodstream infection (BSI) investigation documentation is being updated to reflect management of early recognition of sepsis.

Suppression therapy

Promotion of suppression therapy in inpatients and podiatry patients continues on a risk assessed basis, in order to prevent further infection in high risk patients. Care pathways for MRSA and VRE in inpatient units have been updated during 2014-15.