

Quality and Safety Committee Meeting

Date June 2019

Paper Title: Annual Infection Prevention Report – April 2018 – March 2019
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Agenda Item:
Presented For: Assurance
Paper Category: Quality

Executive Summary:

The purpose of this report is to inform the Quality and Safety Committee of systems, processes and activity in place within the Trust to reduce the risks of Healthcare Associated Infection (HCAI) between the 1st April 2018 and 31st March 2019. It provides assurance to the committee that the Trust is meeting its obligations under current legislation.

The infection prevention and control team has completed most of the annual programme. The following are key elements of the infection prevention activity and performance during the period of April 2018 to the end of March 2019.

- The Trust has had no MRSA bacteraemia cases during the year.
- The Trust has had one *Clostridium difficile* case during the year.
- The Trust has had no E. coli gram negative bacillus bacteraemia case during the year.
- The Trust has had 15 MRSA screening cases.
- The Trust has achieved 89.7% of all staff members being up to date with infection prevention training.
- There have been no outbreaks of diarrhoea and vomiting during this reporting period.
- The Trust achieved 85.93% of front-line staff vaccinated against influenza and had the highest influenza vaccine uptake of all mental health Trusts in England.
- There have been 166 contamination injuries, of these 13 were needle stick injuries.
- A rolling programme of infection prevention audits using the Department of Health Quality Improvement tools for community and mental health services has been conducted.
- Standards of environmental cleanliness have remained high throughout the year.
- Improvements continue to be made with the infection prevention audits that have been undertaken during the year.

Recommendations:
<p>That the Committee:</p> <ul style="list-style-type: none"> • Confirms the assurance / evidence status, including the CQC assurance status in relation to Outcome 8, Compliance with the 'Code of Practice for health and adult social care on the prevention and control of infections and related guidance' as outlined in section 2 of this paper. • Approve the actions taken against completing the annual programme 1st April 2018 – 31st March 2019 (Available on Connect) • Approve the annual programme for the 1st April 2019 – 31st March 2020 (available on Connect)

Governance/Audit Trail:

Meetings where this item has previously been discussed (please mark with an X):					
Audit Committee		Quality & Safety Committee		Remuneration Committee	Finance, Business & Investment Committee
Executive Management Team		Directors		Chair of Committee Meetings	Mental Health Legislation Committee
Council of Governors					

This report supports the achievement of the following strategic aims of the Trust: (please mark those that apply with an X):	
Quality and Workforce: to provide high quality, evidence-based services delivered by a diverse, motivated and engaged workforce	x
Integration and Partnerships: to be influential in the development and delivery of new models of care locally and more widely across West Yorkshire and Harrogate STP	
Sustainability and Growth: to maintain our financial viability whilst actively seeking appropriate new business opportunities	

This report supports the achievement of the following Regulatory Requirements: (please mark those that apply with an X):	
Safe: People who use our services are protected from abuse and avoidable harm	x
Caring: Staff involve people who use our services and treat them with compassion, kindness, dignity and respect	
Responsive: Services are organised to meet the needs of people who use our services	
Effective: Care, treatment and support achieves good outcomes, helps to maintain quality of life people who use our services and is based on the best available evidence.	x
Well Led: The leadership, management and governance of the organisation make sure it's providing high-quality care that is based around individual needs, encourages learning and innovation, and promotes an open and fair culture.	
NHSI Single Oversight Framework	

ANNUAL INFECTION PREVENTION REPORT

1. Background

Infection prevention and control is a requirement of all NHS Organisations and the Trust is required to comply with the 'Code of Practice for health and adult social care on the prevention and control of infections and related guidance'. The criteria within the code reflects a need to assure the public that appropriate quality of care is applied in public service settings where people receive care and are not able to control the standards of hygiene etc themselves they ultimately rely on the service provider to maintain high standards of care on their behalf.

The implementation of best practice is a key action for the Trust in reducing avoidable healthcare associated infections to both patients and staff members. Ensuring infection prevention policies are in place and implemented is a key way to reduce and prevent avoidable HCAI to both patients and staff members and ensuring a safe environment. The risk of acquiring an infection whilst being cared for by the Trust healthcare workers remains low, with the Trust having no Meticillin Resistant *Staphylococcus aureus* (MRSA) bacteraemia cases and only one case of *clostridium difficile* (Cdiff) this past year.

The annual infection prevention and control report is a requirement under the 'Code of Practice' of which Criteria 1 states that 'the nominated Director for Infection Prevention and Control (DIPC) is to prepare an annual report on the state of HCAI in the organisation for which he or she is responsible and release it publicly.' This report has been produced by the Infection Prevention Lead Nurse and Manager on behalf of the DIPC. The annual report summaries the initiatives and activities carried out during 2018-2019 within Bradford District Care Foundation Trust (BDCFT). It explains the Trust management arrangements for infection prevention and incidences of infection. The report aims to assure the public that the minimisation and prevention of infection is given the highest priority by the Trust.

2. REPORTING AGAINST THE ANNUAL PROGRAMME FOR 1ST APRIL 2018 – 31ST MARCH 2019

2.1. Infection Prevention and Control Management Arrangements

The Chief Executive and the Trust Board have designated responsibility for the prevention and control of infection, including the control of healthcare associated infections to the Director of Infection Prevention and Control (DIPC). The DIPC has met with the Infection Prevention Lead nurse and Manager (IPLNM) monthly. The IPLNM has a team of one Senior Infection Prevention Nurse, two Infection Prevention Nurses, one Associate Practitioner and an Administrator who assist in delivering the infection prevention programme.

The Infection Prevention and Control Committee (IPCC) have met quarterly this past year. The Quality and Safety Committee and Professional Council have received quarterly dashboard reports on infection prevention and control and can receive reports at each meeting by exception from the DIPC should issues require escalation.

The Infection Prevention and Control service continues to be provided through a structured annual programme which reflects the Trust priorities.

2.2. Surveillance

The Trust is set a performance target regarding the reporting of MRSA reportable bacteraemia. There have been no such cases in this reporting period. [See table below]

Confirmed positive isolates	April 2018 – March 2019
AmpC beta-lactamase producing bacteria	1
<i>Campylobacter</i>	1
<i>Clostridium difficile</i>	1
<i>E coli</i> bacteraemia	0
Extended Spectrum Beta Lactamase (ESBL) bacteraemia	0
ESBL urine	1
MRSA reportable bacteraemia	0
MRSA Colonisation/Infection	2
MRSA Screening positive	15
MSSA bacteraemia	0

There has been one *Clostridium difficile* (C.diff) case, a post infection review (PIR) was undertaken. The patient had no risk factors for cdiff & was not on any antibiotics, the mostly likely cause of the cdiff is poor food hygiene by the patient who prepared all his own meals which led to him developing campylobacter. He was most likely colonised with cdiff and having the campylobacter gave the cdiff the opportunity it needed to proliferate his bowel.

The Trust has now implemented food hygiene training for all patients who prepare their own meals.

There have been several MRSA bacteraemia cases and *E. coli* gram negative bacillus bacteraemia cases with district nursing care provided to the patients. A PIR was undertaken for each case and any learning from these reviews are shared at the Bradford District Infection team meeting, District Nursing Safety & Quality Forum and mandatory training.

There has been one community MSSA bacteraemia case with district nurse involvement – there were no ‘Lessons to be Learnt’ for the district nursing team and there was evidence of good practices.

The Trust has had 7 cases of MRSA colonisation on the Dementia Assessment Unit since April 2018, four of these specimens have been sent for ribo typing. Three of the results were confirmed as EMRSA-15 lineage (MLST clonal complex 22), this is the most prevalent epidemic healthcare-associated MRSA currently in the UK. It can be easily passed on by healthcare workers by poor hand hygiene and not following infection prevention precautions.

An action plan was put in place which included

- All patients to be screened on admission, monthly and then on discharge
- Positive specimens sent for Ribo typing
- Patients supported to decontaminate their hands before meals.
- Staff members following the hand hygiene and professional appearance policy and carrying the personal alcohol gel dispensers.
- Staff members wearing PPE appropriately.
- Staff members wearing aprons when assisting with meals.

- Staff members decontaminating patient equipment as per infection prevention policy.
- Cleaners increased cleaning of touch areas with acticlor.
- Linen trolleys were replaced, and additional apron dispensers and glove dispensers put up around the ward.

2.2.1. Prevalence Survey

The prevalence survey of infections has continued throughout the year and is an opportunity to review infections in the inpatient areas, antibiotic usage and whether samples have been taken before treatment. Findings from the surveillance are reported on a quarterly basis which enables the early identification of potential hotspots or trends within an area. The surveillance also enables antibiotic prescribing to be reviewed and provides an increased visibility for the infection prevention team on the wards which is helping to identify issues earlier. The table below shows the results from April 2018 – March 2019.

Trust Wide	April – June 18		July – Sept 18		Oct –Dec 18		Jan – March 19	
Type of Infection	HAI	CAI	HAI	CAI	HAI	CAI	HAI	CAI
Abscess			4		2			
CAUTI						1	3	
Cellulitis	6	1	5	2	12	2	10	3
Chest	7	1	15	3	19	3	19	1
Ear			1	1	1			
Eye	4	1	1	3	10	1	4	
Fungal	21	5	20	5	18	2	20	3
Mouth	5		8	1	8	1	5	3
Pneumonia					1			1
Skin		2	7	2	4	1	4	2
Stomach	1			2			1	
Throat		2			2	1		
Urine	21	8	13	9	12	4	15	5
Wound	17	5	22	1	9	3	10	7

2.3. Contamination Injuries

There have been 166 contamination injuries for this reporting period which is a slight decrease from 176 the previous year with most of these injuries from scratches (108).

All incidents were reported, and the staff member was seen by the infection prevention team as per policy. Lessons learnt have been cascaded to staff members through clinical governance systems and mandatory training.

The table below shows the results from April 2018 – March 2019.

April 2018 - March 2019												
Month	A	M	J	J	A	S	O	N	D	J	F	M
Classification												
During phlebotomy				1					1			
During cannulation												
During administration of medicine/vaccine				1				1	1			
During disposal	1	1			1	1						

During surgical procedure							1	1				
By used instruments e.g. dental burr, accucheck					1		1	1			1	
Incorrect disposal in environment		1		1								
Bite	1	2				1		1	1		2	
Scratch	6	8	12	9	13	5	7	4	15	12	8	9
Splash with body fluids to eye, nose, mouth or broken skin							1			1		1
Saliva (spitting) to eyes of mouth	1			2	9	1	1		6	2	3	2
Miscellaneous	1	1			1							
Total	10	13	12	14	25	8	11	8	24	15	14	12
Cumulative Total	10	23	35	49	74	82	93	101	125	140	154	166

2.4. Outbreaks of Diarrhoea and Vomiting

There have been no outbreaks this reporting period within BDCFT services although community nurses have been made aware of several outbreaks in care homes they visit.

2.5. Infection Prevention Network

The infection prevention network is an extension of the existing link worker system whereby attendance is open to any Trust staff member - clinical or non-clinical, who expresses a general interest in infection prevention. Attendance is flexible and is at the discretion of individual teams. It is an opportunity to learn new, and update and extend existing knowledge and related best practice. There is also the opportunity for members to network, share experiences and contribute to the content of each meeting.

The infection prevention network is divided in to two categories (inpatient services and community services) this is to enhance opportunity around accessibility and attendance for staff within inpatient services. It also achieves more relevant and specific information delivery to the diverse services that are within the organisation.

It is expected that the information gained by attendees will be communicated back to individual teams as a means of raising awareness, sharing and promoting safe effective practice. The meetings are held quarterly, and agenda and minutes produced.

A successful study day for the infection prevention network was held in November produced collaboratively with the infection prevention teams within the two acute trusts, Bradford Metropolitan Council and Public Health England. The day updated staff on issues within infection prevention where several key note speakers attended and delivered the following sessions: Influenza outbreak in a care home, urinary tract infections, all things gram negative, Bradford measles outbreak, sepsis and improving patient hand hygiene. The day was evaluated by the delegates and due to positive outcomes in the evaluation there is a study day being planned for 2019.

2.6. Numbers Attending Training

The Health and Social Care Act (2008) identifies the importance of effective education and training for all staff members. One of the key objectives for the infection prevention team this year is for 80% of all staff to be up to date with their infection prevention training by the

31st March 2019. This target has been exceeded, with the overall compliance at the end of March 2019 being 89.7%.

The infection prevention team are continuing to work with the training and development team to improve the flexibility and access to training within the Trust.

CG/Directorate	In-date	Total staff	% of Staff completed Infection Prevention Mandatory Training at end of March 2019
Business Performance	2	2	100%
Clinical Administration Hubs	169	173	97.7%
Community Adults Services	625	672	93%
Community Children's Services	417	436	95.6%
Estates, Facilities & Finance	183	214	85.5%
Human Resources	48	49	98%
IM & T	62	63	98.4%
Medical	14	19	73.7%
Mental Health Care Group	885	980	90.3%
Nursing Development Team	1	1	100%
Nursing Quality & Governance	28	28	100%
Professional Leads	7	7	100%
Project Management Office	13	13	100%
Specialist Services & Nursing	9	14	64.3%
Staff Bank	170	265	64.2%
Trust Exec Office	14	16	87.5%
Trust Management	12	13	92.3%
Trust Total	2659	2965	89.7%

2.7. Audit Programme

2.7.1. Infection Prevention Audits

A rolling programme of infection prevention audits using the Department of Health/Infection Prevention Society Quality Improvement tool has been conducted; this includes mental health, learning disability and community services. The objectives of the audits are to inform services of their level of compliance to the standards, policies and procedures and allow improvements to be made based upon the findings. The Infection Prevention and Control Committee (IPCC) monitor the reports and action plans. The Infection Prevention Team (IPT) has audited thirty-two areas this reporting period, with only four of these being amber. There were several issues which included estates and cleaning issues, each area has an action plan in place and progress with these is monitored by the infection prevention team.

2.7.2. Quarterly Cleanliness Audits

The Hotel Services department complete monthly audits in accordance with the National Specification for Cleanliness: a framework for setting and measuring performance outcomes (2007) guidelines; the auditing process allows for consistent monitoring of standards. All inpatient areas cleaned by Hotel Services staff have met the minimum performance pass rate of 90%; the overall score for all in-patient sites audited being 94.06%. Mental health community sites cleaned by Hotel Services staff have scored 90% and above, the overall score being 94.62%.

The National Specifications for Cleanliness (NSC) in the NHS: Guidance on setting and measuring performance outcomes in primary care medical and dental premises (2010) supports practitioners to meet the registration requirements about cleanliness performance and outcomes. Auditing of dental practices is completed monthly in line with the guidance. Waddiloves dental practice achieved the minimum pass rate of 90% the overall score being 90.51%.

The Trust delivers clinical services from NHS Properties Services (NHSPS) accommodation. The cleaning service at these sites is provided by NHSPS. The Trust receives assurance of cleanliness standards from NHSPS via their audit programme and attendance at the quarterly Infection Prevention and Control Committee meeting. The Trust carries out 6-monthly verification of cleanliness standards at NHSPS sites via an Infection Prevention and Control audit and cleaning audit. There were 2 sites which failed to meet the cleanliness minimum performance pass rate of 90%, Kensington dental and Westbourne Green community site, scoring 88.73% and 87.83% respectively. Following implementation of the action plan BDCFT accompanied NHSPS to carry out a re-audit ensuring cleaning standards were met. The overall verification score for the NHSPS occupied sites was 95.91.

Office accommodation has met the minimum performance pass rate of 75% scoring 87.99% overall.

2.7.3. Observation of Compliance to Hand Hygiene Audit

Hand hygiene is the simplest and most effective measure for preventing healthcare associated infection. Some studies have shown that adherence to recommended hand hygiene practice is unacceptably low among healthcare workers presenting a risk to patients (Pittet et al 2001). As part of the Trusts continuing focus on improving hand hygiene, observation of compliance to hand hygiene audits are undertaken on a quarterly basis. The tool used is based on the WHO '5 moments' and was developed by the Infection Prevention Society. The audit was undertaken by staff working within each individual area. All inpatient wards were green throughout the year. There have been a number of ambers for community services however this does show that the audits are now being undertaken correctly and the issues identified were a lack of compliance to the 'bare below the elbow' policy'. The Sure Wash education system is currently being used to improve knowledge and technique. Staff members are also being reminded of the hand hygiene policy and the infection prevention team are dropping into the teams to check compliance. Hand hygiene posters have also been replaced.

2.7.4. Compliance to the Inoculation Contamination Injury Policy Audit

The National Audit Office report 'A Safer Place to Work' highlights the risk to healthcare workers posed by contamination injuries which include needle-stick injuries, body fluid splashes, bites and scratches. Needle-stick injuries are the second most commonly reported adverse incident within the NHS (17%) and constitute a major hazard for the transmission of hepatitis C (3%), hepatitis B (30%) and HIV (0.3%) from the patient to the healthcare worker depending on the viral load of the patient and the amount of blood that passes from one to the other.

The most frequent type of contamination injury within the Trust during 2017 – 2018 was scratches that broke the skin which accounted for 64% of all contamination injuries.

The aim of the audit was to review the contamination injuries from the 1st April 2017 – 31st March 2018 to establish the current level of compliance of BDCFT employees to the inoculation contamination injury policy and identify areas for improvement.

Conclusion and Recommendations:

The audit has highlighted further areas for improvement in practice. Key work streams are already in place and further recommendations are laid out below:

- Further education and training is required focusing on areas of low compliance identified in the audit. The IPCT will work closely with key stakeholders e.g. clinical managers, service managers and area managers to further enhance the components of existing key work streams.
- Area's without a flow chart on the actions to be taken in the event of a contamination injury to be provided with one.
- A review of audit forms will be undertaken on a quarterly basis.
- The infection prevention team to review the current reporting and follow up processes.
- Lessons learnt from contamination injuries to be shared during mandatory training.

2.7.5. Mattress Audit

An audit of all inpatient bed mattresses has been conducted. This identified several damaged mattresses and covers, a number of these were from cigarette damage. Each area has the audit report and replacement mattresses have been ordered centrally to replace the damaged ones.

2.7.6. Dental Audits

An audit was undertaken to assess the compliance of staff in relation to the BDCFT Infection Prevention Policy and the Dental Health Technical Memorandum 0105 (HTM0105). Decontamination of dental instruments was not considered in this audit. The audit was carried out at all nine sites across the district.

The audit has highlighted the continued excellent infection prevention practices of the staff members within the dental service at all sites. The environmental score is inclusive of the whole clinic environment and not just the dental service which are part of the NHS Property Services. A number of these sites have now been refurbished which has increased the scores and the other sites have works scheduled.

Actions:

- Each area with actions now has an action plan in place.
- The IPCT are working with the areas to ensure actions are completed in a timely manner.
- The audit results have been fed back at staff team meetings.

2.7.7. Management of the Vaccine Cold Chain

Maintenance of the vaccine cold chain is crucial to ensuring the safety of patients/staff receiving immunisations. Inadequate temperature control during storage and transport can reduce the efficacy of the vaccine and compromise the attainment of a satisfactory level of immunity.

In 2010 the NPSA issued a rapid response report about vaccine cold chain storage: <http://www.nrls.npsa.nhs.uk/resources/type/alerts/?entryid45=66111>

The aim of the audit was to establish the continued level of compliance to the NPSA alert on the management of the cold chain.

Conclusion and Recommendations:

The audit found three sites requiring actions, each of these areas has an action plan in place with most of these actions now completed. Cold chain training will continue to be delivered to all staff who immunise, and the training provided to Wakefield immunisers will be reviewed, as this is not provided by the infection prevention team.

2.8. Patient- Led Assessments of the Care Environment (PLACE)

NHS England and the Department of Health recommend that all hospitals, hospices and independent treatment centres providing NHS-funded care undertake an annual assessment of the quality of non-clinical services and condition of their buildings. These assessments are referred to as patient-led assessments of the care environment (PLACE). PLACE visits assess cleanliness standards, condition of the environment inside and out, how well the building meets the needs of the users, quality and availability of food and drink, privacy and dignity and how dementia friendly the environments are.

PLACE teams consist of patient and staff assessors; at least 50% of the team being patients and/or members of the public. Patient assessors make recommendations for improvement during their visits and these recommendations are used to develop a local improvement plan which is available on the Trust's website. Recommendations for improvements during the 2018-19 assessments included:

- refurbishment of the WCs in The Four Seasons Café;
- further improvements to external wayfinding signage for Service Users travelling to LMH by bus;
- environment improvements to LMH acute wards including redecoration and art work affixing to walls;
- reconfiguration of the path by the Library to improve access routes to LMH reception;
- recovering of the furniture in the 136 Suite with wipe-clean fabric to meet Infection Prevention guidance;
- site to be re-tarmacked in areas with pot hole damage; repainting of the zebra crossing outside Moorlands View.

The PLACE assessment recommendations are progressed and monitored throughout the year by the Patient Environment Action Group.

PLACE information is used by a range of public bodies such as the Care Quality Commission, NHS England, NHS Improvement, the Department of Health, Clinical Commissioning Groups and Local Healthwatch. All the results are published by NHS Digital and made publicly available.

PLACE audits were undertaken from April to May 2018; the Trust scored above the national average in all areas of the PLACE assessment.

	National average	BDCFT overall	Lynfield Mount Hospital Site	Airedale Centre for Mental Health
Cleanliness	98.47%	98.95%	98.68%	99.71%
Food (Overall)	90.17%	98.79%	98.91%	98.43%
Organisation Food	89.97%	95.69%	95.69%	95.69%
Ward Food	90.52%	99.72%	99.62%	100.00%
Privacy, Dignity & Wellbeing	84.16%	96.80%	96.32%	98.18%
Condition, Appearance and Maintenance	94.33%	98.75%	98.58%	99.23%
Dementia Friendly Facilities	78.89%	88.71%	87.43%	92.46%
Disability	84.19%	94.14%	93.97%	94.64%

2.9. Water Safety

As per the Department of Health guidance, the Trust has a water safety group which meets quarterly to monitor the Trust legionella and pseudomonas action plan. The action plan is reviewed by the Infection Prevention and Control Committee on a quarterly basis.

2.10. Seasonal Influenza Vaccination Campaign

The 2018/19 seasonal flu campaign for the Trust front line healthcare workers commenced on the 1st October 2019. The campaign this year was delivered by the Infection Prevention Team.

This year's campaign was developed following a review of the previous campaigns and information from two facilitated focus groups. The analysis led to the following being included as part of the campaign.

- Five launch events offering staff the vaccine followed by a piece of homemade cake
- Two Halloween events with staff being offered the vaccine and a Halloween themed cupcake
- Drop in sessions at different sites, health centres and individuals' workplaces
- Staff members offered pre-booked appointments
- Teams being able to book a suitable date and time for the whole team to be vaccinated in the workplace
- Early morning and evening sessions for shift workers
- Sessions at lunchtime
- Attending staff induction to offer the vaccine to all new employees
- Offering the vaccine at staff meetings
- Offering the vaccine at infection prevention training sessions
- The NHS flu video is played at all infection prevention training sessions
- A message on pay slips

- Weekly communications in e-update
- Weekly screen savers with influenza myths and updates on the campaign
- Use of Social media including Facebook and Twitter

The five launch events were extremely popular with over 300 frontline healthcare workers vaccinated, the following shows the results at the end of the campaign where we were again the highest achieving Mental Health and Community Trust in England:

- Medical staff 85.93%
- Qualified nurses 86.87%
- Allied health professionals 87.57%
- Support staff 83.28%
- Total 85.93%

2.11. Infection Prevention Annual Programme

The infection prevention annual programme (available on [Connect](#)) has been monitored by the IPCC throughout the year with quarterly dashboard reports to the Quality and Safety Committee and Professional Council. Most of the actions have been completed, with the two still ongoing added to the 2019-20 programme.

3. Implications

3.1 Legal and Constitutional

None

3.2 Resource None

3.3 Quality and Compliance

- The report details the systems, processes and activity in place within the Trust to reduce the risks of Healthcare Associated Infection (HCAI) between the 1st April 2018 and 31st March 2019.

4. Risk Issues Identified

None

6. Monitoring and review

The infection prevention annual programme is reviewed quarterly

7. Timescales/Milestones

Quarterly dashboard reports will be submitted to the Quality and Safety Committee and Professional Council