

INFECTION PREVENTION AND CONTROL

Director of Infection Prevention and Control Annual Report

April 2018 – March 2019

Title: Director of Infection Prevention and Control (DIPC)
Annual Report
April 2018 - March 2019

Executive Summary:

Each year the Director of Infection Prevention and Control (DIPC) is responsible for producing an annual report. The purpose of the report is to inform the Trust Board of progress in delivering the Infection Prevention and Control Programme. This includes providing assurance to the Trust that appropriate measures are being taken to maintain the safety of patients and staff and to agree the action plan for sustained reduction and improvements in Healthcare Associated Infections (HCAI) in 2018/19. The following report provides assurance on the Infection Prevention & Control Programme and activity for 2018/19.

Summary of key achievements:

- The Trust remains compliant with the Health and Social Care Act: Code of Practice for Health and Adult Social Care on the prevention and control of infections and related guidance (The Hygiene Code) and CQC regulation 15
- All inpatient areas and other high-risk areas had annual infection prevention and control audits which measured compliance with standards of infection prevention and control practice. Audit results demonstrated sustained improvement
- Resources and controls to support the prevention and control of infections are in place and the level of assurance is high. Assurance is provided through implementation of the annual work programme with quarterly reports and exceptions reported to the Infection Prevention Control and Decontamination Committee (IPCDC) and Trust Safety Committee
- Monthly collaborative health economy meetings between partner organisations to discuss and review *Clostridium difficile* infections (CDI) and MRSA/MSSA bacteraemias to identify joint learning
- Infection prevention and control education continues to be a priority with mandatory training being provided to all Trust staff as E-learning, workbooks and classroom based as per the training matrix
- Wider teaching involvement including, care certificate, link nurses study days, IV therapy and pre-registration student nurses studying at Oxford Brookes University
- National collaboration to develop decontamination guidelines for the management of toys used in healthcare

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1. Introduction

The Trust continues to have a comprehensive programme of infection prevention and control activities which has supported a declaration of full compliance with the Health and Social Care Act 2008: Code of Practice for health and adult social care on the prevention and control of infections and related guidance and CQC regulation 15.

The Act requires that the Board of Directors has a board-level agreement outlining the Boards' collective responsibility for minimising the risks of infection and the general means by which it prevents and controls such risks.

2. Overview of infection control activities during 2018/19.

The Infection Prevention and Control Team (IPCT) are led by the Director of Infection Prevention and Control (DIPC) and the team members are:

- Ros Alstead, DIPC and Director of Nursing and Clinical Standards until December 2018 (retired)
- Pete McGrane, Interim DIPC (from December 2018 to date), Clinical Director Oxfordshire Community Health
- Helen Bosley, Nurse Consultant Infection Prevention and Control (1.0 WTE)
- Sue Baldwin, Senior Infection Prevention and Control Nurse (1.0 WTE)
- Sarah Thorpe, Senior Infection Prevention and Control Nurse (0.6WTE)
- Lindsay Powell, Team Administrator (0.6 WTE)
- Consultant Microbiologist, via service level agreement (SLA) Oxford University Hospital Foundation Trust (OUHFT)

The Infection Prevention and Control team (IPCT) continues to work hard to strengthen and develop links with all services. This has resulted in raised awareness and improved knowledge of infection prevention and control. The team supports the infection prevention and control link staff, as well as providing advice, informal education, dissemination of best practice, and monitoring of compliance with national standards. Additional advice and support is provided via a service level agreement (SLA) with Oxford University Hospitals NHS Foundation Trust. This equates to two sessions from a Consultant Microbiologist every week and 24hr/7day week on call microbiology service.

3. Governance arrangements

3.1 Reporting to the Trust Board

The IPCT provides weekly updates to the Trust governance meeting. The DIPC also reports directly any issues by exception to the Board or its governance or Executive Committees.

3.2 Infection Prevention, Control and Decontamination Committee (IPCDC)

The Trust has an Infection Prevention, Control and Decontamination Committee (IPCDC) which meets every quarter. In 2018/19 it met on 25th April 2018, 26th July 2018, 1st November 2018 and 16th January 2019. The IPCDC is accountable to the Quality Sub Committee –Safety.

IPCDC monitor compliance with infection prevention and control and decontamination requirements. The IPCDC also monitors the infection prevention and control annual work programme, ensures that arising infection control issues are addressed and that compliance with the Health and Social Care Act, the NHS Litigation Authority (NHSLA) standards and CQC regulation 15 are maintained. Included in the committee membership are the DIPC, IPCT, Modern Matrons, Service Managers, Pharmacy, Facilities and Estates managers, Service Leads, a medical representative, Occupational Health and other departments as required according to the agenda. Microbiology expertise is also provided for the IPCDC by a Consultant Microbiologist via an SLA with the Oxford University Hospital Foundation Trust (OUHFT). See appendix 1.

4. Policy and Procedures

The Health and Social Care Act (2008) details which policies and procedures are appropriate for regulated activities and provide a guide to what may be needed to demonstrate compliance. CQC regulation 15 outlines essential standards required to be met.

Procedures reviewed, updated and approved during 2018-19 were: -

- Decontamination
- Hand hygiene
- Standards precautions
- MRSA management
- Tuberculosis management
- Outbreak management
- Multi resistant organism management
- Influenza

All these procedures and 'At a Glance' guides are available to staff via the Infection Prevention and Control intranet page.

5. Local service improvement

5.1 Infection prevention and control intranet page

The intranet page is continually being reviewed and updated with new and relevant information and data for staff to access. It contains all policies and procedures, relevant patient information leaflets, product information, quarterly IPCT newsletters, contact details and management of outbreaks information. It is promoted in mandatory training as an easily accessible resource for staff.

5.2 Adenosine triphosphate (ATP) testing

All community hospitals and older adult mental health wards (high risk areas) use the Clean Trace system for monitoring cleanliness of the environment and medical equipment. This system records the level of ATP (adenosine triphosphate) or energy produced by living organisms and provides robust timely data on the efficacy of cleaning taking place. It has been used in conjunction with the cleanliness audits which are conducted by the Matrons and Facilities Managers.

5.3 MRSA screening

The Department of Health for England requires all NHS Trusts to screen patients using a focussed screening programme. As a result, the Trust undertakes MRSA screening in community hospital wards and the older adult's mental health wards. Screening compliance is monitored weekly by the infection prevention and control team and quarterly reports provided to the directorates and IPCDC.

5.4 Health economy partnership

The Trust continues to develop and work collaboratively with other healthcare providers. This includes use of the patient inter healthcare transfer form, attendance at other Trusts' infection prevention and control meetings (i.e. OUHFT, Oxfordshire Clinical Commissioning Groups (OCCG) and Buckinghamshire Clinical Commissioning Groups), learning from incidents review meetings.

Oxford Health NHS Foundation Trust uses a combination of the OCCG primary care and OUHFT antimicrobial prescribing guidelines which are regularly reviewed. The Trust is also working collaboratively with the Royal Berkshire NHS Foundation Trust to provide services in the Rapid Access Care Unit (RACU) in Henley.

5.5 Sepsis Pathway

- The Trust continues to ensure that staff are aware of the risks of sepsis. Specific work areas undertaken in the last year included the delivery of education and training sessions to the Out of Hours (OoH) clinical workforce through the evening educational sessions. These included two sessions delivered in April and November 2018 attended by in excess of 45 clinical staff (Nurses, Paramedics and GP's) to both.
- Staff in community hospitals continue to benefit from 'recognition of the deteriorating patient training and there have been no incidents of 'missed deterioration' of patients in the last year.
- In the community nursing teams, training has been developed to introduce 'Comprehensive Geriatric Assessment' skills to the DN teams such that they can recognise and take appropriate action when they find patients who have deteriorated including those with risk of sepsis.

Actions for the forthcoming year are to;

- Agree a Trust 'Sepsis strategy' aimed at improving awareness and responsiveness of all our services across the Trust in the recognition and management of sepsis.
- Introduce a 'sepsis awareness' video as part of the Trust induction programme'

6. Healthcare Associated Infections (HCAI's) – surveillance organisms

6.1 MRSA bacteraemia

There have been no cases of MRSA bacteraemias in 2018-19 within the Trust, the same as last year (2017-18). There was a patient identified with MRSA bacteraemia on transfer from an older adult mental health ward to the OUHFT. A full health economy collaborative post infection review meeting was held, as per Department of Health requirements, and the case was deemed unavoidable.

6.2 MSSA bacteraemia

There have been five cases of MSSA bacteraemia identified in community patients, who were not admitted to the Trust. Full root cause analysis (RCA) were completed. There were two cases in 2017-18.

6.3 Gram negative organism bacteraemias

The increase in gram negative bacteraemia infections is a national concern. Mandatory surveillance of *E.Coli*, *Pseudomonas* and *Klebsiella* bacteraemia has been introduced by the Department of Health.

6.3.1 *E.Coli* bacteraemias

Targets have been applied to *E.Coli* bacteraemia cases to reduce the number by 50% by 2020. There were a total of twenty cases of *E.Coli* bacteraemia patients identified in the Trust. Five cases occurred in inpatients of the Trust. However, fifteen occurred before Trust admission and were pre-48-hour community cases. All were thoroughly investigated using the Department of Health RCA tool. The root cause for this organism is extremely hard to determine but likely to be the urinary tract in about 50% of cases. This has increased from sixteen cases in 2017-18.

6.3.2 *Pseudomonas* bacteraemia

There have been three *Pseudomonas* bacteraemia cases identified in patients seen in our EMU services. These are therefore pre-48-hour community cases. This has increased from one case in 2017-18.

6.3.3 *Klebsiella* bacteraemia

There have been three *Klebsiella* bacteraemia cases identified in patients seen in our EMU services. These are therefore pre 48-hour community cases. There were no cases in 2017-18.

Further work into the root causes of these infections is being planned as a health economy.

6.4 *Clostridium difficile* infection (CDI)

Oxford Health NHS Foundation Trust contributes relatively few cases of *Clostridium difficile* to the overall Oxfordshire health economy totals.

In July 2013 the Oxfordshire health economy *Clostridium Difficile* Infection (CDI) monthly review meetings commenced. This meeting includes representations from OHFT, OCCG, Public Health England (PHE) and OUHFT. Full detailed RCA's for all patients identified in the preceding month with CDI across the health economy are presented. This practice is cited as good practice by the area commissioning team.

The OCCG threshold for Oxford Health NHS Foundation Trust (OHFT) in 2018/9 was set at seven cases, which has been unchanged since 2015-16.

The final number of cases by the end of March 2019 was eight. This has decreased slightly from ten cases in 2017-18. Five cases were attributed to OHFT and three cases were pre-72-hour patients admitted or seen in our emergency multidisciplinary units (EMU) and therefore are community cases. On detailed investigation there were no issues identified relating to patient care or the cleanliness of the environment for each case/ patient investigated. All cases were deemed unavoidable.

In every CDI case, a comprehensive review of the care of the patient and the ward environment is undertaken using the Department of Health RCA tool and any learning fed back to the clinicians, wards and areas concerned. Antimicrobial prescribing is reviewed by the pharmacist and OUHFT Consultant Microbiologist to ensure appropriateness and any identified actions are taken. The RCA's are submitted to the weekly clinical governance meeting for further review and discussion.

7. Antimicrobial Stewardship

Antimicrobial stewardship is a program that promotes prudent use of antimicrobials, improves the safety and quality of patient care, contributes to reduction of antimicrobial resistance and decreases the spread of multi-resistant bacteria.

The Pharmacy team are leading on work within the Trust to improve antimicrobial stewardship.

This includes:

- Quarterly audits and reports presented at the IPCDC. Overall there is generally good compliance with prescribing antibiotics within guidelines. However, areas of improvement have been identified and further work is planned.
- Extending the antimicrobial audits to cover all services within the trust that use or prescribe antimicrobials.
- Re-designing of the antimicrobial audit template to improve interpretation of collected data.

- Clinical screening of medication charts, monitoring antimicrobial use and challenging any inappropriate prescribing by pharmacists regularly visiting the inpatient wards.
- Pharmacists ensuring that prescribed antimicrobials are compliant with guidelines with respect to choice, dose, route of administration and duration. They also ensure that timely reviews of antimicrobials are carried out and IV antimicrobials are switched to oral as soon as clinically appropriate.
- Regular reviews of medication stock lists for the inpatient wards and Urgent Care units by the medicines management team, to ensure that only appropriate antimicrobials are available and that restricted ones are removed from the units.
- Collaborative partnership with regular attendance at the OUH Antimicrobial Steering Group.
- Posting Antimicrobial guidance updates on Netformulary as well as sending to all prescribers and non-medical prescribers.
- Induction for new doctors including guidance on the appropriateness of antibiotic prescribing as specified in the Start Smart – Then Focus initiative promoted by Department of Health, the use of local antimicrobial guidance, and legal requirements and good practice surrounding prescribing of antimicrobials.
- Reviewing antimicrobial prescribing for all *Clostridium difficile* cases in the Trust and as required.
- Ensuring up to date Trust Antimicrobial protocol is readily available online.
- Further development of antimicrobial stewardship within the Trust, led by Medicines Management.

8. Outbreaks

8.1 Norovirus Outbreaks

There have been five outbreaks of diarrhoea and vomiting in the Trust during 2018/9. Four suspected norovirus outbreaks in mental health wards affecting 23 patients and 6 staff. One suspected norovirus outbreak in a community hospital affecting two patients and two staff.

8.2 Influenza Outbreak

There has been one outbreak of influenza in a community hospital affecting three patients and no staff.

8.3 Invasive Group A Streptococcus (iGAS) outbreak in community services

There has been an outbreak of invasive group A *streptococcus* (iGAS) infection affecting patients living in Oxfordshire. This is a notifiable infection. In total seven patients were identified with iGAS from January – July 2018, and one patient with non-invasive GAS. This patient was a household contact of another patient with iGAS.

All affected patients lived in the same area, had wounds and were known to the local district nursing service. A detailed and comprehensive investigation was conducted, led by Public Health England (PHE), using multi-agency collaboration.

These included:

- Enhanced surveillance and suspicion for all patients with wounds, being managed by the team
- Screening of the whole district nursing team, including office staff and managers and commencement of chemoprophylaxis for staff. All staff screened negative
- A review of hand hygiene and equipment cleaning practices and processes reinforced. Ongoing monitoring and reviews are in place.
- Information letters for patients, relatives and staff regarding the outbreak

A comprehensive action was developed and there have been no further cases.

9. Facilities

The Trust adheres to the national cleaning standards, colour coding and specification. Cleanliness monitoring is completed on a quarterly basis by the modern matrons across the Trust and the generated reports are fed back to Facilities and service managers. The responsibility for environmental cleanliness sits with the ward manager.

The results are monitored by facilities and reports are provided for the commissioners and the IPCDC committee.

Infection prevention and control nurses work closely with facilities team, and the facilities managers attend the IPCDC providing service reports. The IPCT attend, support and participate in the annual PLACE (Patient Led Assessment of the Clinical Environment) assessments.

10. Estates

The IPCT have been involved in reviewing and supporting refurbishments and new builds within the Trust. This has required attendance at key design and planning meetings and the review of plans and minimum build standards.

This work has included:

- Advice and review of building plans for Littlemore site:
 - Phoenix 136/ seclusion suite.
 - New front door assessment unit
 - New ward for learning disabilities patients
- Advice and review of community bases in Amersham
- Advice and review of podiatry in Oxford

11. Audits

11.1 Infection Prevention and Control Audits

There was a comprehensive and robust annual infection prevention and control audit programme for 2018/19, which consisted of infection prevention and control audits based on national standards. High levels of compliance have been maintained.

The audits were undertaken within services including all community hospitals, urgent care and inpatient mental health wards. All audits were completed during the audit year using adapted versions of the Infection Prevention Society (IPS) audit tools for monitoring infection prevention and control guidelines within the acute and community settings. Action plans were requested following each audit to address any identified areas and monitored.

Infection prevention and control (IPC) audits carried out during 2018-19 includes:

- Hand hygiene and compliance with 'bare below the elbows'
- Use of personal protective equipment
- Management of sharps
- Isolation facilities
- Decontamination of equipment
- Infection prevention and control audits, including cleanliness of the patient environment

Across the Trust the average results for inpatient wards was 93%. No re-audits were undertaken as all clinical areas passed the audit. Facilities areas which fell below 85% have action plans in place.

In addition, community teams including podiatry and community team bases are audited. The average results are 90%. Any areas falling below 85% are followed up.

All audit results were reviewed, and reports provided for each directorate. Learning outcomes were shared with relevant staff directly and via infection prevention and control link practitioners, service/ward managers and the infection prevention and control newsletter. A summary of the audits is presented to the IPCD committee quarterly and via an annual report.

In addition, some low risk areas completed self-audits which were reviewed by the IPCT. In areas of poor or non-compliance are followed with the service by the IPCT.

11.2 Hand Hygiene audits

Hand hygiene observational audits were conducted every two months in community hospitals and monitored by the IPCT, and unit managers. During 2018/9 the compliance average was 98%. Compliance with bare below the elbows was 100%.

Hand hygiene practical assessments are conducted every two months in mental health wards. This assessment reviews staff technique for handwashing rather than observational practice. This is due to the challenges of staff being observed in practice as in mental health staff are often working on a one to one basis with patients in single rooms.

Community hospitals with single rooms also conduct these practical assessments. All audits are reviewed and monitored by the modern matrons and the IPCT. During 2018/19 the compliance average was 95%. Compliance with bare below the elbows was 97%. Any areas falling below the acceptable level are followed up by IPCT and action plans developed for improvement.

A summary of the audits are presented to the IPCDC quarterly and via an annual report.

The first cohort of hand hygiene practical assessments have been introduced into community-based services based on a risk assessment basis.

Practical hand hygiene assessments have currently been introduced in:

- children young peoples' community services
- district nursing
- speech and language services
- Luther street medical centre

Audits are carried out within the teams bi annually and there is ongoing work to embed this into the services. The IPCT are supporting, monitoring and reviewing regularly this.

12. Decontamination

12.1 Decontamination arrangements

There is a nominated Trust Decontamination lead. The lead attends and provides quarterly update reports to the IPCDC regarding overall Trust compliance with decontamination requirements. The Decontamination lead and DIPC are members of the IPCDC which reports to the Quality Sub Committee –Safety. The vast majority of products used in the Trust are single use. However, podiatry uses reusable instruments and these are decontaminated via a SLA with Synergy. Dental services reprocess instruments via local decontamination procedures which are compliant with HTM 01-05.

12.2 Audit of Decontamination

Audits of the decontamination of patient equipment are undertaken annually and are incorporated in the infection prevention and control audit programme. Adenosine triphosphate (ATP) testing is carried out on medical equipment monthly in community hospitals and older adult mental health wards. This process monitors the efficacy of cleaning. Results are reviewed and monitored by the IPCT monthly and quarterly reports produced and disseminated to the directorates.

During 2018/19 the average score for ATP testing was 88%

In this year, decontamination records have been centralised on the Trust computer drive allowing easy access for staff to review. These results are reviewed and compliance reports being developed for the services. Where improvement is required action plans will be requested and compliance monitored. Mattress audits are also being completed monthly and the results kept centrally on the shared drive for easy review and access. The overall results this year, reflect the new process, while teams are transitioning from paper records to

the new online system. Further work to embed the new system over the coming year is planned.

Medical devices decontamination records should be completed by 75 wards/areas. The average completion rate this year is 75%, an improvement from 48% last year.

Mattress check records should be completed by 47 wards/areas. The average completion rate this year is: 72%. The collation of this data is now being undertaken by the Trust Clinical Audit team.

13. Training activities

Training sessions are provided for ward based clinical staff.

The total percentage of staff trained in 2018/19 was 84% against a Trust target of 90%. On average a third of staff who have a booked a place, do not attend the training. This data is collated by the Learning and Development department and the training is delivered by the following methods; class room-based training, work books and E-learning. All forms of training and their content are annually reviewed and updated to meet the learning outcomes of the current UK Core Skills Training Framework and training requirements of staff. In addition to standard training, the IPCT provides bespoke training on request. A total of 17 additional service specific training sessions have been provided including, children's services, and the health care assistants care certificate. In addition, five specialist IV therapy training sessions were delivered. The IPCT also provide infection prevention and control training sessions to the infection control link nurses, who in turn deliver the training back into the workplace. One whole study day was delivered to this group in 2018/19 to ensure there is a strong emphasis on education. In addition, a link nurse study specifically for community nurses was held. It received good feedback and will therefore be held annually.

The IPCT provide ongoing advice, guidance and on the spot learning opportunities such as managing outbreaks.

14. Risks and future investments

There will continue to be ongoing support for the Adenosine Triphosphate (ATP) environmental testing system in older adult mental health wards and the community hospitals.

The infection prevention and control team will continue to work in partnership with other allied services in the Trust to promote safe practice, in particular Health and Safety, Estates and Facilities and Occupational Health teams.

The team will also continue to develop and work in partnership with external organisations to strengthen and support the patient pathway across the health economy.

More audit capacity is required to develop and expand hand hygiene practice assessments/audits in community services. Additional audit capacity is also required to manage medical devices decontamination compliance across the Trust.

15. Conclusion

During 2018/19 Oxford Health NHS Foundation Trust has completed a comprehensive work programme to prevent and manage infection and minimise the risks to patients, staff, visitors and the Trust. CQC regulation 15 has been maintained throughout the year.

Clostridium Difficile remains a challenge in achieving further reduction in cases and it is likely the Trust has reached the irreducible level. This has been demonstrated by the review process undertaken in the health economy review meetings.

The emergence of resistant organisms and antimicrobial resistance remain a real challenge in modern healthcare. The focus remains on infection prevention and control, developing and improving patient care pathways across the health economy, reviewing and improving clinical practice and robust reviews and scrutiny of each case of infection to identify learning and ensure the continued high standard of care.

The reduction of gram-negative bacteraemia infections remains a challenge. The vast majority of cases develop in the community rather than inpatient services and therefore further work nationally and locally is ongoing to understand the root cause and appropriate strategies to try and reduce the incidence.

Appendix 1

IPCDC terms of reference



Oxford Health
IPCDC ToR April 2019