

# **INFECTION PREVENTION AND CONTROL**

**ANNUAL REPORT 2011 - 2012**

Title: Infection Prevention and Control (DIPC) Annual Report, April 2011- March 2012

Executive Summary:

The attached report provides assurance on the Infection Prevention & Control Programme & activity for 2011/12

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 Board of Directors of progress in delivering the infection prevention and control programme. This includes providing the Board with assurance 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 2012/13.

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 outcome 8.
- All In Patient areas and other high risk areas have had an environmental audit conducted which has measured compliance and demonstrated standards of infection prevention and control practice.
- Resources and controls to support the prevention and control of infections are in place and the level of assurance that controls are minimising risks is high. Assurance is provided through implementation of the annual work programme (Appendix 1) with quarterly reports and exceptions reported to the Infection Prevention Control and Decontamination Committee.
- Infection prevention and control education continues to be a priority with demonstrations and practical training provided to all trust staff as per the training matrix.

The Board is asked to note this report, approve the work programme and continue to support the infection prevention and control programme to minimise the risks of healthcare associated infection, as required by the Health and Social Care Act and CQC outcome 8.

The Infection Prevention & Control Team has adequate resources to deliver its work programme and meets all targets.

Action:

The Board is asked to:

- note the report
- approve the work programme for the forthcoming year

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## **1. Introduction**

In April 2011 Oxford Health NHS Foundation Trust acquired Community Health Oxfordshire (CHO). The infection prevention and control teams for both Trusts amalgamated. The Trust continues to have a comprehensive programme of infection prevention and control which supports 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 outcome 8.

The Act requires that the Board of Directors has a board-level agreement outlining the Board's 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 2011/12**

The Infection Prevention and Control Team is 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
- Helen Bosley, Infection Prevention and Control Matron
- Sue Baldwin, Senior Infection Prevention and Control Nurse
- Sarah Thorpe, Senior Infection Prevention and Control Nurse
- Jennifer Matthews, PA and Team Secretary to Infection Prevention and Control Service

The Infection Prevention and Control Team have worked hard to strengthen and develop links with all services, including prisons and offender health. This resulted in raised awareness and improved knowledge of infection prevention and control, supports the link staff, as well as providing advice, informal education, dissemination of best practice, and monitoring of compliance with standards. Additional advice and support are provided via a service level agreement (SLA) with Oxford University Hospitals NHS Trust. This equates to 2 sessions from a consultant microbiologist every week and 24hr /7day week on call microbiology service.

## **3. Governance arrangements**

### **3.1 Reporting to the Board of Directors**

The Infection Prevention and Control Team provide monthly summary reports for the Chief Executive and Board. The DIPC also reports directly any issues by exception to the Board or its Governance or Executive Committee.

### **3.2 Infection Prevention and Control and Decontamination Committee (IPDC)**

The Trust has an Infection Prevention and Control Committee (ICC) that meets every quarter. In 2011/12 it met on 2<sup>nd</sup> March 11, 7<sup>th</sup> June 11, 5<sup>th</sup> October 11, and 18th Jan 12.

Following the merger the committee was renamed as the Infection Prevention and Control and Decontamination Committee in recognition of its function within the Trust of monitoring compliance with decontamination requirements. The IPCDC monitors the infection prevention and control annual work programme, ensures that infection control issues which arise are addressed, and ensures that compliance with the Health and Social Care Act, the NHS Litigation Authority (NHSLA)

standards and CQC outcome 8 is maintained. Included in the committee membership are the DIPC and Infection Prevention and Control Team, Modern Matrons, facilities managers, service leads, a medical representative, and representatives from the Estates department, Procurement, Clinical Governance, Education department, Health and Safety, and other departments such as Occupational Health attend 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 Hospitals NHS Trust. Regular meetings have taken place with the DIPC Matron & Microbiology team.

#### 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 outcome 8 outlines essential standards to be met.

Following the merger in April 2011 the IPCT reviewed and updated all procedures for infection prevention and control with an overarching supporting infection prevention and control policy.

The policy approved was Infection Prevention and Control IF1 (sets out the corporate strategy for preventing and controlling infection).

Procedures approved during 2011-12 were:-

- *Clostridium difficile* management
- Hand hygiene
- Management of parasitic infestations
- Specimen collection and transport
- Chicken pox and shingles
- Influenza
- MRSA management
- Standard precautions and personal protective equipment
- Decontamination
- Isolation
- Outbreak Management for diarrhoea and vomiting and other infections
- Tuberculosis
- Vancomycin resistant enterococcus (VRE)
- Environmental cleaning, linen and laundry
- Management of patients with hepatitis viruses and the human immunodeficiency virus

In addition 'at a glance' guides have been developed to assist staff with easy reference information. The 'at a glance' guides developed are:

- Hepatitis A
- Hepatitis B
- Hepatitis C
- Hepatitis E
- HIV
- Management of MRSA in mental health
- Management of MRSA in community
- *Clostridium difficile*
- Impetigo
- Shingles
- Diarrhoea and vomiting
- Scabies
- Chicken pox
- Tuberculosis
- Influenza

All these procedures and 'at a glance' guides are available to staff via the infection prevention and control intranet page.

The patient interhealthcare transfer form has been introduced into mental health services to facilitate improved information transfer when patients are moved between organisations. This form is already integral in community hospitals for patient transfers.

Oxford Health NHS FT uses the primary care antimicrobial prescribing guidelines which are regularly reviewed by the PCT.

## **5. Local service improvement**

### **5.1 Standardisation of cleaning manual**

The IPCT in partnership with facilities services has developed a new Trust cleaning manual which has been circulated to all areas as well as being available via the infection prevention and control intranet page. Decontamination of equipment and cleaning practices are included in the mandatory training programmes.

### **5.2 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, all infection prevention and control quarterly newsletters, contact details, and management of outbreaks information. It is promoted in mandatory training as an easily accessible resource for staff to access.

### **5.3 Adenosine triphosphate (ATP) testing**

The community hospitals have continued to use the clean trace system for monitoring cleanliness of the environment and 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 monthly cleanliness audits which is conducted by the Support Service managers. It has demonstrated sustained standards of cleanliness across the trust and is being reviewed to incorporate introduction into older adult wards in mental health

## **6. Healthcare Associated Infections – surveillance organisms**

### **6.1 MRSA bacteraemia**

There were two cases of MRSA bacteraemia identified in community hospitals which were thoroughly investigated using the Department of Health root cause analysis (RCA) tool.

### **6.2 MSSA bacteraemia**

There were two cases of MSSA bacteraemia identified in community hospitals which were thoroughly investigated using the Department of Health root cause analysis (RCA) tool.

The Trust has not contributed to any of these infections and there have been no MRSA or MSSA bacteraemias in the Trust any year previously. Risk factors for development of MRSA bacteraemia include being colonised with MRSA or having an MRSA infection other than in the blood stream (non bacteraemic infection). The incidence of MRSA and MSSA in the community is increasing.

### **6.3 E.Coli bacteraemia**

From June 2011 all cases of E.Coli bacteraemia require mandatory reporting. There are no targets attached and this is for monitoring purposes only.

There were six cases of E.Coli bacteraemias identified in community hospitals which were thoroughly investigated using the Department of Health root cause analysis (RCA) tool. The root cause for this organism is extremely hard to determine however none of the cases was deemed to be attributable to Oxford Health NHS FT.

### **6.4 Clostridium difficile infection (CDI)**

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

The PCT commissioners' target for 2011/12 was set as 13 cases against an end of year outturn in March 2011 of 15 cases. The CQUIN gateway was identified as a target for CDI cases and a limit of 20 cases set. The Trust performance met this target by five cases, whilst narrowly missing the health economy target. As the CQUIN gateway target of 20 was achieved this enabled the Trust to access the funding for achieving identified CQUIN projects.

The final number of cases by the end of March 2012 attributed to Oxford Health was 15. In November 2011 a full review of the CDI cases was undertaken by the Trust's IPCT, PCT commissioners and microbiologists from Oxford University hospitals. Of the 11 cases reviewed only seven were felt to be true cases of CDI, whereas the other cases did not meet the true clinical presentation of CDI and some patients were being sampled inappropriately.

A review of the CDI procedure was undertaken and further advice and information issued to staff. Extra training was undertaken by the IPCT with senior ward managers and staff in the correct recognition and management of patients with suspected and confirmed CDI and a refresher training presentation was developed and made available to staff on the IPCT intranet page to access.

This may impact on the number of national cases for the forthcoming year.

In every CDI case, a comprehensive review of the care of the patient and the ward environment is undertaken as a root cause analysis using the Department of Health RCA tool. An action plan is developed and any learning is fed back to the wards and areas concerned. Antimicrobial prescribing is reviewed by the Medicine Management lead to ensure appropriateness and any identified action required taken. The RCAs and action plans are submitted to the weekly clinical governance meeting for further review and sign off.

On detailed investigation there were no issues identified relating to patient care or the cleanliness of the environment for each case/ patient investigated.

## **7. Outbreaks**

### **7.1 Norovirus & Influenza Outbreaks**

There have been 15 outbreaks of diarrhoea and vomiting in the Trust in 2011-12.

Eight outbreaks were in community hospitals and in seven of them the causative organism was confirmed as norovirus. The outbreaks affected a total of 79 patients and 54 staff.

There were seven outbreaks of diarrhoea and vomiting in mental health wards but no specimens were sent and therefore the causative organism was not able to be identified. A total of 38 patients and 15 staff were affected.

There were two significant outbreaks of diarrhoea and vomiting in HMP Huntercombe. These outbreaks were managed by the Health Protection Unit. A total of 90 patients were affected and five staff.

There was a confirmed outbreak of seasonal influenza in a mental health ward affecting six patients and three staff.

All outbreaks were managed by the Trust Infection Prevention and Control Team and reported to the HPA via the online reporting system.

In 2012/13 ensuring that specimens are sent from mental health wards will be managed proactively.

## **8. Facilities**

### **8.1 Cleaning services**

#### **Patient Environment Action Team (PEAT)**

PEAT is an annual assessment, established in 2000 by the National Patient Safety Agency, of inpatient healthcare sites in England with more than ten beds.

During January and March 2012 the annual PEAT inspections took place in all in patient areas in the Trust including mental health and community hospitals.

The results of the Patient Environment Action Team (PEAT) assessments indicate a continued high standard in environmental cleanliness and provision of food for inpatient areas. The infection control nurses join the PEAT inspections to look at environmental compliance. An action plan is produced for areas where improvement is identified. It is expected that the Trust will receive good and excellent scores. The results are not expected until late summer 2012 as part of the NHS rating system.

### **8.2 Deep Cleaning**

Providing a clean safe environment is a key requirement of any healthcare setting. As directed by the Department of Health, deep cleans were carried out throughout the year across all trust patient sites, including inpatient and outpatient areas.

### **8.3 Monitoring**

Cleanliness monitoring is completed on a quarterly basis by the modern matrons in mental health wards and the generated reports are fed back to the service managers. The responsibility for environmental cleanliness sits with the ward manager.

Community hospitals conducted monthly cleanliness audits via the support service managers and the results are monitored by the matrons. The Trust adheres to the national cleaning standards, colour coding and specification.

A quarterly cleaning audit is completed and provided for the commissioners.

Infection prevention and control nurses attend the facilities monitoring meetings, and the facilities managers attend the infection prevention, control and decontamination committee providing service reports.

## **9. Estates**

### **Building advice**

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

This work has included:

- Review of the new hospital build on the Manor House site in Aylesbury
- Extension to Thames House, Littlemore
- Review of the new Highfield unit, Warneford site
- Review of refurbishment plans for Vaughan Thomas ward, Warneford
- Advice for new reception area for Marlborough House, Milton Keynes
- Review of minimum build standards

The IPCT has also been involved in supporting the review and standardisation of laundry facilities requirements in response to new draft national guidance and advising on the specification of the washing machines required to meet decontamination standards.

## **10. Audits**

The annual infection prevention and control audit programme for 2011/12 consisted of infection prevention and control audits based on Essential Steps (2006).

The audits were undertaken by a range of services including all community hospitals, and prison healthcare facilities 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. Improvement plans were requested following each audit. Infection prevention and control (IC) audits carried out during 2011-12 includes:

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

All audits reports were recorded. Learning outcomes were shared with staff 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.

### **Hand hygiene audit**

Hand hygiene observational audits were conducted monthly in all community hospitals and monitored by the infection prevention and control team and community hospital service and unit managers. Where scores of less than 95% were achieved for 3 consecutive months, the audits were increased to weekly until compliance had improved. During 11/12 the compliance average was 99%.

Hand hygiene practical assessments are conducted every 2 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. All audits are reviewed and monitored by the modern matrons and the infection prevention and control team. During 11/12 the compliance average was 92%.

A summary of the audits is presented to the IPCD committee quarterly and via an annual report.

Hand hygiene competency assessments are a core component of all mandatory training sessions and are underpinned with a practical and knowledge based component. To support this, hand hygiene competency assessments are carried out locally by infection prevention and control link practitioners (ICLPs), ward managers and other senior staff in the workplace to target hard to reach staff.

### **11. Training activities**

Training sessions are provided for clinical and non clinical staff. Both sessions include a practical hand hygiene competency assessment but the clinical staff have an additional hour on key infection prevention and control measures.

The total number of staff trained in 2011-12 was 2938. This data is collated by the learning and development department and is broken down into:

- 1544 Classroom sessions
- 420 Induction sessions
- 520 Workbooks
- 455 e-Learning

This has equated to 82% of available staff being trained against the target of 85%. Further work is being developed to improve the number of staff trained in 2012-13

The IPCT has worked with the SHA to devise key core points to be included in infection prevention and control training, which have been reflected in the subsequent SHA statutory and mandatory training matrix. An in house e-learning training programme is being developed for staff to use. An infection prevention and control workbook has also been developed for staff to download and complete.

A total of 24 additional service specific training sessions have been provided including dental, children's and speech and language services. Targeted training has also been provided for senior staff working in community hospitals and older adult mental health wards that have high risk patients for *Clostridium difficile*.

The infection prevention and control team also provides infection prevention and control training sessions to the Infection Control Link Practitioners (ICLP), who in turn deliver training back in the workplace. Two whole study days were delivered to this group in 2011/12 to ensure there is a stronger emphasis on education.

The infection prevention and control team provides ongoing advice and guidance and on the spot learning opportunities such as managing outbreaks.

## **12. Risks and future investments**

The implementation of Adenosine Triphosphate (ATP) environmental testing system has been very successful in community hospitals. This system of environmental testing has demonstrated consistent improvement in standards of cleanliness both for the environment and patient equipment. This improvement may have had an influence on the significant reduction in *Clostridium difficile* cases and older adult mental health wards will also be included. The possibility of introducing ATP into some other mental health areas is being investigated.

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 and occupational health teams.

## **13. Conclusion**

During 2011/12 Oxford Health NHS FT had a comprehensive programme to prevent and manage infection control to minimise the risks of infection and general means by which it prevents and controls such risks. Compliance with CQC outcome 8 has been maintained throughout the year and *Clostridium Difficile* CQUIN targets were met.

The continued reduction in *Clostridium Difficile* remains a challenge for the forthcoming year.