

Quality and Safety Committee – 18th August 2024

Infection Prevention and Control Report – Reporting timescale January – March 2024

Introduction

This report provides assurance from the Director of Infection Prevention and Control (DIPaC) that the trust has a robust, effective and proactive Infection Prevention and Control (IPC) strategy and work programme in place, that demonstrates compliance with the Health and Social Care Act 2008 (updated July 2015) also referred to as the Hygiene Code.

To bring the six monthly report in line with the financial year and Trust reporting, this report will cover three months, 1st January to 31st March 2024. The next 6 monthly report will cover April 2024 – September 2024.

Background

The Infection Prevention and Control (IPC) team has 4.5 Whole Time Equivalent (WTE) Infection Prevention and Control Nurses and 1 WTE IPC administrator. The team is supported and managed by the Deputy Director of Nursing and Quality/Deputy Director of Infection Prevention and Control (DDIPaC).

The Infection Prevention and Control Board Assurance Framework (BAF), updated by NHS England (NHSE) in September of last year, continues to inform this report and the Infection Prevention and Control Assurance group to support the organisation in responding in an evidence-based way to maintain the safety of patients, service users and staff. The BAF combined with the National Infection Prevention and Control Manual for England (April 2022) will support the trust to develop, review and provide internal assurances.

Purpose of the report

The aim of this report is to provide the Quality and Safety Committee with assurance there is a robust, effective and proactive infection prevention and control programme in place, that demonstrates compliance with the Health and Social Care Act 2008 (updated July 2015) and to assure the board that all IPC measures taken are in line with government guidance.

Analysis of the issue

1.0 Infections

1.1 COVID-19 figures from 1st January - 31 March 2024:

Probable nosocomial cases 8-14 days:

Jan 2024 = 5

Feb 2024 = 5

March 2024 = 1

Definite nosocomial cases 15 days+:

Jan 2024 = 14

Feb 2024 = 3

March 2024 = 4

Total number of Covid-19 inpatient cases:

Jan 2024 = 24

Feb 2024 = 13

March 2024 = 8

Although the nosocomial cases are in line with the regional and national picture, review of the Trust cases has identified that patient symptoms for being Covid-19 positive at this time were less evident in the early stages of infection, changes in using lateral flow tests and therefore patient admissions and placement has played a part in onward transmission and nosocomial cases.

1.2 Outbreaks

Between January – March 2024 there was a total of 13 outbreaks.

- 9 COVID-19
- 2 Norovirus
- 1 Gastroenteritis
- 1 Loose stools

Detailed below are the areas where and when the outbreaks occurred:

- Dalgleish Ward – COVID-19 (commenced on 03/01)
- St Lukes Ward 1 – COVID-19 (commenced 04/01)
- CCH Ward 1 – COVID-19 (commenced 04/01)
- Beechwood Ward – COVID-19 (commenced 04/01)
- Rutland Ward – Norovirus (commenced 10/01)
- CCH Ward 2 – COVID-19 (commenced 16/01)
- Beechwood Ward – COVID-19 (commenced 20/01)
- Heather Ward – COVID-19 (commenced 24/01)
- Bosworth Ward – Gastroenteritis (commenced 07/02)
- St Lukes Ward 1 – COVID-19 (commenced 20/02)
- Charnwood Ward – Norovirus (commenced 01/03)
- Beechwood Ward – Loose stools (commenced 06/03)
- St Lukes Ward 1 – COVID-19 (commenced 15/03)

All outbreaks were managed in line with the Trust outbreak policy. Review of the cases identified potential causes as in previous outbreaks: patient placement, symptom onset delayed and visitors accessing the building and areas.

2.0 Decontamination

- 2.1 A Quarterly decontamination meeting is in place and reports to the Infection Prevention and Control Assurance Group.
- 2.2 LPT owned sterilisation equipment and washer disinfectors are used by the Podiatry team, are in service date and maintenance regimes are compliant with HTM 01-01 Management and Decontamination of Surgical Instruments (medical devices) used in Acute Care. Monthly compliance reports completed by the Medical Device Team are shared with the Podiatry service to provide assurance, deviation from the planned maintenance programme will be reported by exception to the Decontamination Group and the Medical Device Group. There were no reported deviations during this timescale.
- 2.3 An Authorised Engineer (AE) has now been sourced and will provide an external review and assurance in line with national recommendations and requirements

3.0 Legionella

3.1 Loughborough Hospital Phase 2

- A number of clean and disinfections have taken place, alongside a high number of taps being replaced.
- Following each clean and disinfection cycle, sampling for bacteria has shown outlets where the filters can be moved.
- T Safe filters are still in position until an outlet has been proven clear of the bacteria
- In November 2023 a Chlorine Dioxide Unit was installed to add a safe to consume level of Chlorine Dioxide into the water supply to kill the bacteria, sampling continues.

3.2 Loughborough Hospital Phase 1

- A number of clean and disinfections have taken place, alongside a high number of taps being replaced.
- Following each clean and disinfection cycle, sampling for bacteria has shown outlets where the filters can be moved.
- T Safe filters are still in position until an outlet has been proven clear of the bacteria
- The kitchen system has now been cleared of the bacteria and bacteria count levels are reducing across the wards.
- Due to the configuration of the water supply in Phase 1 it is not practical to install a Chlorine Dioxide Unit.
- From 4- 5 January 2024 further Legionella bacteria samples were taken from all currently filtered outlets.

- Loughborough Phase 1 testing of 100 outlet results showed an additional 32 outlets testing negative and had the filters removed.
- 15 January 2024 four new Wash Hand Basins (WHB) with Thermostatic Mixing Valves (TMV) installed in Charnwood and Swithland Wards.

3.3 Rutland Memorial Hospital

No further Legionella detected

3.4 Coalville Community Hospital

Chlorine levels checked and the system is working.

4.0 Seasonal Flu vaccination programme – interim update

The staff flu vaccination campaign was completed at the end of March 2024. Staff flu vaccination 2023/24 uptake for LPT was 46.6% which was above Midland's average which was 41.3%

Planning for the 2024/25 staff flu campaign has commenced with the potential to look at co-delivery of both flu and Covid-19 staff vaccination if the Covid-19 autumn booster is available to frontline healthcare workers.

5.0 Reporting and monitoring of HCAI Infections

There are four infections that are mandatory for reporting purposes:

- Meticillin Resistant Staphylococcus Aureus (MRSA) bloodstream infections.
- Clostridioides difficile infection (previously known as Clostridium difficile)
- Meticillin Sensitive Staphylococcus Aureus (MSSA) bloodstream infections.
- Gram Negative bloodstream infections (GNBSI)

5.1 MRSA Blood stream infection rates

The national trajectory is set at zero. The Trust performance for MRSA bacteraemia from 1st January to March 2024 is zero. To date the trust have had 0 reportable MRSA infections.

5.2 Clostridium difficile infection (CDI) rates

Leicestershire Partnership Trust reported 16 cases of CDI between April 2023 and March 2024. Six of those cases were patients being cared for on Beechwood ward. This number equates to 37.5% of the total number of patients. It is worth noting that two other wards managed by LPT both had 3 cases each which equates to 18.75%. One of these wards is in the Evington building and adjacent to Beechwood ward.

1st April – 31st March 2024

- April 23 – Clarendon ward, Evington centre
- April 23– East ward, Hinckley & Bosworth
- April 23– East ward, Hinckley & Bosworth
- April 23 – Beechwood ward, Evington centre

- May 23– Clarendon ward, Evington centre
- May 23– Clarendon ward, Evington centre
- June 23– Dalglish ward, Melton
- July 23 – North Ward, Hinckley & Bosworth
- Sept 23– Beechwood ward, Evington Centre
- Sept 23 – Ward 1 – Coalville
- Nov 23 – Beechwood ward, Evington Centre
- Dec 23 – Beechwood ward, Evington Centre
- Jan 24 – Beechwood ward, Evington Centre (resample of a patient known to be CDT +ve)
- Feb 24 – Charnwood ward, Loughborough Hospital
- March 24 – East ward, Hinckley & Bosworth Hospital
- March 24 – Beechwood ward, Evington Centre

Due to the number of cases identified on Beechwood ward, a deep dive review was completed by the IPC team, this was in addition to concerns raised around the ventilation systems within this ward. A clinical harm review was commissioned by the previous Executive Director of Nursing, AHP's and Quality/ Director of Infection Prevention and Control.

The scope of the clinical harm review was focused on harm linked to airborne healthcare acquired infections (nosocomial) and Covid-19 deaths, as well as the recent deep dive review of Clostridium difficile cases.

In conclusion, the IPC clinical harm review has not identified harm as a direct/sole result of poor ventilation on Beechwood Ward. The review identified that there are several factors and variables that have contributed to increased outbreaks and Clostridium difficile incidences linked to staff IPC practices, human factors linked to use of personal protective equipment, hand hygiene and bare below the elbow compliance, environmental cleaning, and patient factors. Senior IPC nurse is working with the matron and Ward Sister to support improvements. This learning has also been shared through the IPC assurance meeting.

Reviews into all CDI infections have identified a number of learning points:

- Placement of patients
- Not encouraging/offering patients Fluid Resistant Surgical Masks (FRSM) to wear when positive/ in shared environment with symptomatic/positive patient.
- Staff compliance with wearing Personal Protective Equipment (PPE)/FRSMs
- Documentation lacking to support that post infection and daily 3rd cleans were carried out during outbreaks.
- Delays with sampling of patients and reviewing results of samples. (Some patients had several episodes of loose stools and repeated diagnostic testing carried out (DRE) prior to samples being obtained to rule out any potential infective causes.

- Delays with source isolation of patients
- Commodes found to be dirty/soiled during IPC support visits and general tidiness of the ward.
- No IPC care plans in place to support with source isolation/management of infection symptoms.
- Delays in medical review/plans for patients with infections

With the introduction of the Patient Safety Incident Risk Framework (PSIRF) Post Infection Review (PIR) root cause analysis reports are no longer required as part of the governance process, although cases continue to be reviewed to identify learning for action. The IPC team are working with the patient safety team to develop the PSIRF process for infection reviews.

5.3 MSSA Blood stream infection rates

There is no identified Trust trajectory for MSSA, with national requirements for reporting and surveillance focused on acute trust services only. However, the monthly data for this infection rate is submitted to the IPC Assurance group as part of the quality schedule, this supports the overview of the infection rates and the potential of an increase which may need further review and investigation.

There has been 1 case of MSSA aligned to LPT, minimal data is available but will form part of the future work plan (as below).

5.4 Gram Negative Blood Stream Infection (GNBSI) rates

The NHS Long Term Plan supported a 50% reduction in Gram-negative bloodstream infections (GNBSIs) by 2024/25, however due to the pandemic response some of this work has been on hold. The GNBSI reduction toolkit developed by NHS England is currently out for review and refresh. Once updated and received this toolkit will form part of LPT's IPC work plan. Raw data is received from the microbiology laboratory at University Hospitals of Leicester and is interpreted using SystemOne and patient details by the Head of IPC for LPT. A plan is in place to progress this work with colleagues across Leicester, Leicestershire, and Rutland, which will support an intense review of the cases identified (as in below) and identify actions for learning and improvement.

E-Coli Infections

- May 23 – Ellistown, Coalville (no urinary catheter)
- May 23 – Rutland ward, Rutland (no urinary catheter)
- June 23 – Swithland ward, LB (no urinary catheter)
- June 23 – Swithland ward, LB (long term urinary catheter)
- Oct 23 – Beechwood ward, Evington centre (long term urinary catheter) unsuccessful Trial without Catheter (TWOC)
- Dec 23 – Aston Ward, Bradgate Unit (short term urinary catheter and history of Urosepsis)

- March 24 – Charnwood ward, LB (no urinary catheter)

6.0 Ventilation

6.1 The Trust has re-appointed the existing Authorising Engineer AE(V) for ventilation directly, GPT Consulting. Continuity of expert advice remains an important factor in compliance with NHS IPC requirements including high consequence respiratory infections such as Covid-19 and Influenza.

6.2 The Ventilation Safety Group (VSG) has met subsequently at 2 monthly intervals to provide the foundation for ventilation compliance discussions in the Trust. Attendance is from key representatives across the Trust.

6.3 Due to concerns regarding the previous external maintenance programme and lack of assurances, the VSG group commissioned a full ventilation audit to provide the Trust an assessment of the adequacy of the ventilation systems deployed across our estate. This feedback has been extended to include a supplementary audit of sites with repeated Covid-19 outbreaks. Reports complete and issued to the group. Capital investment will be required based on clinical requirements for the wards, this will be discussed and monitored through the Trusts Ventilation Group.

6.4 The VSG has provided appropriate advice to H&S and IPC to support the Reset & Rebuild transformation work, and hybrid working, and more recently post covid arrangements.

6.5 A crucial aspect of VSG is to address issues around asset and compliance data checks, technical compliance, design advice, approval of capital designs, reviewing management processes and organisational governance arrangements.

6.6 Key achievements include:

- Rectification of non-complaint plant in ECT clinical areas to ensure safe working during covid.
- Working with H&S colleagues, providing the narrative to advise safe spaces during covid across the Trust's estate.
- Full site audit across all former UHL maintained sites. Report commissioned by IPC and shared at VSG.
- Establishment of a fan cleaning process for heatwave.
- Fire damper maintenance process in place.
- Ventilation advice and decisions for ad-hoc requests for alterations or change of use of clinical or office areas.

7.0 Water Management

7.1 The water safety group (WSG) meets every 2 months. The WSG members have been appointed by the Trust and competence for the role validated by our Authorising Engineer AE(W), Hydrop. Governance of the group is established with appropriate representation and supported with current documentation including a Water Safety Plan and water Policies.

7.2 Appropriate Responsible Person (RP) training has been undertaken by members of the WSG, with further training for remaining colleagues in place. Membership comprises representation from key areas of the Trust, including Estates, IPC, H&S, alongside our existing AE(W) Hydrop, and newly appointed independent advisor from UHL Microbiology.

8.0 Hand hygiene

Hand Hygiene audits have been live on AMaT since April 2023.

Hand hygiene data:

- Jan 2024 = 99% compliance - 942 audits submitted
- Feb 2024 = 99.2% compliance - 1009 audit submitted
- March 2024 = 99% compliance - 921 audits submitted

9.0 Cleaning

9.1 Monthly performance reporting to the following groups for oversight; IPC Assurance group, IPC Operational group, Estates & Medical Equipment group. Reporting shows a month-on-month improvement across multiple sites.

9.2 Recruitment has improved significantly for domestic posters and reliance on agency staff reduced. The feasibility of an EFM bank is being established.

9.3 Maintenance contracts for the repair/servicing of equipment have been reviewed and in some cases, contractors changed to improve response & rectification times.

9.4 Business Continuity plans are in the process of being developed to meet urgent needs during a time of restricted staffing levels. This will be shared through the IPC assurance group meeting.

9.5 Risk assessments for critical activity have been completed and risk register is in development for EFM services.

10.0 Antimicrobial stewardship

10.1 Antimicrobial stewardship remains a vital tool in the fight against resistance and preserving the usefulness of antimicrobials so that they benefit patients who really need them.

10.2 The lead pharmacist for antimicrobial stewardship continues to oversee the maintenance of the actions and controls within the trust policy. This includes careful consideration of stock lists for inpatient wards, bi-annual audit, education and training and prescribing protocols.

10.3 Antimicrobial surveillance is a useful tool to monitor consumption. A sophisticated dataset has been developed to monitor trends in consumption across inpatient areas, with quarterly reports being fed into Medicines Management Committee and the Infection Prevention and Control Assurance Group.

10.4 On an annual basis, there is international recognition by way of the European antimicrobial awareness day and world antimicrobial awareness week. Within LPT, we mark this event by

ensuring our audits are undertaken at this time, whilst also doing promotion in the trust communication to all staff.

- 10.5 The lead pharmacist for antimicrobial stewardship also continues to represent LPT in Leicestershire-wide groups.'

Proposal

This three month report outlines assurance from the Director of Infection Prevention and Control (DIPaC) demonstrating compliance with the Health and Social Care Act 2008 (updated July 2015) also referred to as the Hygiene Code.

Decision required

The Committee is asked to confirm a level of assurance that processes are in place to monitor and ensure compliance with the Health and Social Care Act 2008 (updated July 2015) also referred to the as the Hygiene Code and NHS England IPC Board Assurance Framework to ensure that all IPC measures are taken in line with PHE Covid-19 guidance to ensure patient safety and care quality is maintained.

Governance table

For Board and Board Committees:	Quality and Safety Committee	
Paper sponsored by:	James Mullins – Interim Executive Director of Nursing, AHP and Quality	
Paper authored by:	Amanda Hemsley – Head of Infection Prevention and Control Nurse	
Date submitted:	08 August 2024	
State which Board Committee or other forum within the Trust’s governance structure, if any, have previously considered the report/this issue and the date of the relevant meeting(s):		
If considered elsewhere, state the level of assurance gained by the Board Committee or other forum i.e., assured/ partially assured / not assured:		
State whether this is a ‘one off’ report or, if not, when an update report will be provided for the purposes of corporate Agenda planning	6 monthly reports	
STEP up to GREAT strategic alignment*:	High Standards	x
	Transformation	
	Environments	x
	Patient Involvement	
	Well Governed	x
	Single Patient Record	
	Equality, Leadership, Culture	
	Access to Services	
	Trustwide Quality Improvement	x
Organisational Risk Register considerations:	List risk number and title of risk	5
Is the decision required consistent with LPT’s risk appetite?	Yes	
False and misleading information (FOMI) considerations:	Yes	
Positive confirmation that the content does not risk the safety of patients or the public	Yes	
Equality considerations:		

Version 1.0