

Public Trust Board – 21 December 2021

Infection Prevention and Control Six-Monthly Report to Trust Board

Introduction

This six monthly 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.

Background

The Infection Prevention and Control (IPC) team is currently has 5.1 Whole Time Equivalent (WTE) Infection Prevention and Control Nurses, supported and managed by the Assistant Director of Nursing and Quality/Deputy Director of Infection Prevention and Control (DDIPaC). Recruitment into the IPC team will take place in the new year due to two team members retiring (one had previously retired and returned) which will take the team to 3.7 WTE IPC nurses and a 0.8 WTE IPC administrator.

The Infection Prevention and Control Board Assurance Framework (BAF) was updated on the 12 February 2021. The revised document added/updated a further 32 Key Lines of Enquiry (KLoEs). The BAF was reviewed, and information and reports embedded within the self-assessment. The BAF self-assessments and subsequent updates have been shared with Trust and both NHS England & Improvement (NHSE & I) IPC leads and Care Quality Commission (CQC) as detailed in previous Trust board 6-month IPC reports, all BAF actions completed.

Purpose of the report

The aim of this report is to provide the Trust Board 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 COVID-19 IPC guidance.

In addition the report provides updates on;

- Outcome and actions following the NHS England & Improvement (NHSE&I) Infection Prevention Control (IPC) visit on 14 October 2021.
- Information, quality improvement learning and actions for compliance in regard to Covid-19 outbreaks and nosocomial Covid-19.

- Actions and compliance for the notification of Legionella Anisa in the water systems at Coalville Community Hospital in November 2021.
- Podiatry decontamination update

Analysis of the issue

1. NHS England & Improvement (NHSE& I) IPC visit and action plan

- 1.1 Following the NHS E & I IPC visit on the 14 October 2021 the Trust was rated as GREEN. Appendix 1 is a copy of the letter following the visit. Overall, the trust was commended on its governance arrangements and improved standards of infection prevention and control. The response and welcome received from the staff in LPT was also acknowledged.
- 1.2 A small number of areas for improvement were identified at the visit and a plan developed to address these (Appendix 2).

2. Legionella Anisa identified in Coalville Community Hospital

- 2.1 Precautionary water treatment work is now under way at Coalville Community Hospital (CCH) following testing after routine planned preventative management identified increased temperatures during the monitoring phase. Water samples taken from CCH indicated the presence of legionella. As a precaution, immediate action across the whole building was undertaken with advice and support from our Trust water safety group and an independent water advisor (the authorising engineer). Further detail is provided under the water management section 7.

3. COVID-19 pandemic

- 3.1 The Covid-19 pandemic continues into its 21st month since being declared initially as a national level 4 incident within the United Kingdom.
- 3.2 Covid-19 is an infectious disease caused by a newly discovered coronavirus. Coronaviruses are a family of viruses that cause diseases in animals. Seven, including Covid-19 have made the jump to humans.
- 3.3 Covid-19 is closely related to Severe Acute Respiratory Syndrome (SARS) which swept around the world in 2002 to 2003.
- 3.4 National guidelines and communications issued continue be logged through the Trust Incident Control Centre and or Clinical Reference Group and action cards for staff guidance are updated to ensure as a Trust we have responded in an evidence-based way to maintain the safety of patients, staff, volunteers and contractors. A weekly Covid-19 bulletin is emailed out on a Wednesday afternoon with all recent updated guidance, advice and news and sent to all staff within the trust.
- 3.5 Lateral flow testing for all staff within LPT continues to be supported and has been successful in identifying a number of staff who had a positive result despite being asymptomatic.

3.6 LPT figures for Covid 30 March 2020 until 30 November 2021 are:

- Total number of positive cases – 726
- Total number of positive cases on the day of admission – 424
- Total number of cases positive after admission – 302

The positives after admission are broken down as follows: -

- Positive result within 2 days (Community onset) - 31
- Positive result between 3 and 7 days (Indeterminate Healthcare association) - 75
- Positive result between 8 and 14 days (Probable Healthcare Onset) - 55
- Positive result 15 days or later (Definite Healthcare association) – 141

3.7 Covid-19 outbreaks

They have been six Covid-19 Outbreaks between 1 July 2021 and 30 November 2021, the following information identifies the locations and numbers of patients and staff affected.

Area	Date identified	Date closed	Patient numbers	Staff Numbers
Community Mental Health Team (liaison based at UHL Staff only)	09/08/21	07/08/21	0	3
Beacon Unit	24/08/21	25/09/21	2	2
CMHT Hawthorne centre Staff only	25/08/21	22/09/21	0	2
Willows Cedar ward	31/08/21	08/10/21	2	4
Mill Lodge	06/10/21	17/11/21	8	7
Coalville Ward 4	14/10/21	25/11/21	7	2

The outbreaks for Mill Lodge and Coalville ward 4 have been identified as Serious Incidents (SIs) and are currently undergoing the required review investigation processes to identify learning and actions to be shared widely to reduce the risk of further outbreaks.

Learning identified as part of the outbreak reviews (which will form a further learning board) included:

- Staff must have daily LFT's when working within an outbreak situation. This includes facilities and estates. When not in an outbreak, staff should be completing LFT's twice weekly.
- Screening and triaging of visitors
- Mask wearing in admin offices
- Social distancing at work

- Keeping desks clear and wiping down between use
- Carrying out symptom checks with patients that have been in contact with positive staff members
- Early visits from the IPC team in outbreak situations have been beneficial
- How we inform patients and their families that they have HCAI and how this is recorded
- Recording the use of offering patients masks, even if their physical/mental health doesn't allow and ensuring that this is recorded
- Sharing of equipment
- Staff using shared areas during outbreak situations such as lockers

3.8 Further guidance 'Infection prevention and control for season respiratory infections in health and care settings (including SARS-CoV-2) for winter 2021 to 2022', was published by the government on the 24 November 21. The guidance is currently under review by the IPC team, to be discussed at the IPC group on 14 December 21 and a briefing to Operational Executive Board on 17 December 21.

3.9 The UK Health Security Agency (UKHSA), formerly Public Health England (PHE), has up-to-date genomic definitions for all variants of concern (VOCs) and variants under investigation (VUIs). A UKHSA technical briefing issued on 30 November 2021 outlined there are 5 current VOCs and 7 VUIs. The World Health Organization (WHO) designated B.1.1.529 as a VOC, named Omicron, on 26 November 2021.

The UKHSA issued a SARS-CoV-2 variant of concern: Omicron variant risk assessment on 8 December 2021. The risk assessment outlines that the Omicron variant is likely to outcompete the Delta variant in the UK. Is as least as transmissible as the Delta variant and there is not yet sufficient data to quantify either vaccine effectiveness or risk of re-infection.

4. Seasonal Flu vaccination programme

4.1 LPT is required to deliver an annual seasonal flu campaign, offering all staff the opportunity to have the seasonal flu vaccine.

4.2 For context, the flu vaccination programme runs between October and February every year. This year the flu vaccination programme is running alongside the Covid-19 vaccination and booster programme.

4.3 The figures below identify the current position of the trust for the uptake of the flu vaccine.

Accurate to 30 November 2021

All staff	No. staff	Influenza	
		1 dose	Vaccine Uptake (%)
Total	7349	3399	46.3%
<i>Of which LPT staff</i>	<i>6732</i>	<i>3167</i>	<i>47.0%</i>
<i>Of which Workforce Bureau staff</i>	<i>617</i>	<i>232</i>	<i>37.6%</i>
Staff with direct patient contact	5804	2591	44.6%
<i>Of which LPT staff</i>	<i>5187</i>	<i>2359</i>	<i>45.5%</i>

<i>Of which Workforce Bureau staff</i>	617	232	37.6%
Staff without direct patient contact	1545	808	52.3%
<i>Of which LPT staff</i>	1545	808	52.3%
<i>Of which Workforce Bureau staff</i>	n/a	n/a	n/a

4.4 The figures for the uptake of the vaccine have been broken down into staff groups which supports further Analysis and communication actions.

Staff with direct patient contact by staff group (inc WFB) As reported to Public Health England each month	No. staff	Influenza	
		1 dose	Vaccine Uptake (%)
Doctors	234	126	53.8%
Qualified Nurses, midwives and health visitors	2264	1074	47.4%
All other professionally qualified clinical staff	1008	571	56.6%
Support to Clinical Staff	2298	820	35.7%
Staff with direct patient contact	5804	2591	44.6%

4.5 The seasonal flu vaccine for staff has been delivered using a multi-pronged approach to support the flexibility and access opportunities for staff. Peer vaccinators continue to provide flu vaccinations as well as bookable and walk-in clinics. The opportunity to have the flu vaccination and the Covid booster at the same time has also been provided.

4.6 The table below outlines the FHCW uptake by directorate teams up the 30 November 2021.

By Directorate

Directorate	No. staff	Influenza	
		1 dose	Vaccine Uptake (%)
Bank	1120	315	28.1%
CHS	1720	910	52.9%
Enabling Services	587	332	56.6%
FYPC.LD	1529	783	51.2%
Hosted Services	232	126	54.3%
Mental Health Services	1544	701	45.4%
Workforce Bureau	617	232	37.6%
TOTAL	7349	3399	46.3%

4.7 Trust uptake data is further analysed including high and low uptake teams, teams with higher staff numbers with low uptake with a greater potential to improve/impact overall Trust performance.

4.8 Reasons for higher vaccination uptake triangulated with national data include key influencers within teams, committed leadership to the flu programme, flexibility, and a strong local peer vaccinator.

Analysis of the uptake data by staff group identified that Allied Health Professionals staff are more likely to have their flu vaccine in comparison to medical and nursing staff. The trend in LPT is that many of the highest uptake teams are AHP teams/services.

5. Reporting and monitoring of HCAI Infections

5.1 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)

5.2 MRSA Blood stream infection rates

The national trajectory is set at zero. The Trust performance for MRSA bacteraemia from April 2021 to November 2021 is zero.

5.3 Clostridium difficile infection (CDI) rates

The agreed trajectory for 2020/21 was 12 and is set internally by the Clinical Commissioning Group (CCG) (identified as EIA toxin positive CDI). There have been 4 cases of health care associated infection of CDI between April 2021 and November 2021:

- July 2021 – St Lukes, Ward 3
- September 2021 – Evington Centre, Beechwood Ward
September 2021– Loughborough Hospital, Swithland Ward
- October 2021 – Melton Hospital, Dalglish Ward

5.4 All episodes of MRSA bacteraemia and CDI are identified and are subject to a Root Cause Analysis (RCA) investigation. All action plans developed as part of this process are presented to the Trust IPC meeting which supports the sign off of completed actions and an opportunity to share learning. Delayed sampling was identified as one of the learning points, and the need to consider infections other than Covid-19.

5.5 MSSA Blood stream infection rates

There is no identified Trust trajectory for MSSA, with national requirements focused on acute trust services only. However, the monthly data for this infection rate is submitted to the Clinical Quality Reporting Group (CQRG) 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

5.6 Gram Negative Blood Stream Infection (GNBSI) rates

In 2017 the Secretary of State for Health launched an important ambition to reduce healthcare associated Gram-negative bloodstream infections by 50% by 2021 and reduce inappropriate antimicrobial prescribing by 50% by 2021.

From April 2018 the Gram Negative Bloodstream Infection rates include:

- E-Coli
- Klebsiella pneumonia

- *Pseudomonas aeruginosa*

5.7 There is no Trust trajectory for GNBSI, however monthly data for this infection rate is submitted to the Clinical Quality Report Group (CQRG) as part of the quality schedule reporting (Please note this captures E-Coli infection rates only). Due to the pandemic a number of planned workstreams to look at improving the reduction in rates had halted, work is now underway to re-establish the working groups.

6. Ventilation

- 6.1 As part of the Facilities Management (FM) transformation planning and in light of the ventilation requirements/restrictions relating to COVID-19, the Trust appointed an Authorising Engineer (AE) for ventilation directly rather than using the shared service (hosted by University Hospitals of Leicester (UHL)).
- 6.2 Following the appointment of the AE (V) in April 2021, they are working with the Trust ventilation group to progress arising issues, asset and compliance data checks, reviewing management processes and organisational governance arrangements.
- 6.3 An initial Ventilation Safety Group took place in May 2021 and has met subsequently at agreed intervals and the work plan continues to be developed.
- 6.4 A full ventilation audit is required, and a brief is being developed to obtain quotations. This action is under review by the Ventilation group and forms part of the work being undertaken by Turner & Townsend, Facilities Management in 7.5 below.
- 6.5 Information regarding the maintenance and management of systems from the shared service – hosted by UHL is being reviewed by the AE.
- 6.6 The AE provides advice and recommendations to individual queries raised and work has been undertaken at the Electro Convulsive Therapy (ECT) suite at the Bradgate Unit to ensure that services can continue in a COVID-19 safe way. Minor works completed and the area is compliant for ventilation, further works planned to increase space and upgrade ventilation services due to age/condition.
- 6.7 There are no emerging or immediate risks identified for action.

7. Water Management

- 7.1 A serious incident report is in progress regarding the legionella previously reported and managed at the Bradgate Unit.

Precautionary water treatment work is now under way at Coalville Community Hospital (CCH) following testing after routine planned preventative management identified increased temperatures during the monitoring phase. Water samples taken from CCH indicated the presence of legionella. As a precaution, immediate action across the whole building was undertaken with advice and support from our water safety group and an independent water advisor (the authorising engineer).

- 7.2 During routine water testing at Coalville hospital, traces of a very low risk of Legionella Anisa were detected in the water. The drinking water remained safe, but the following actions were taken:

- immediate action to flush this out of the system.
- To maintain patient and staff safety as a precautionary measure, installation of filters to the taps were carried out
- Designated drinking water taps that have been clearly identified as safe.
- Patient admissions to the wards were held until the system has been flushed

The remedial work took place overnight on 24 November 2021 from 9pm for approximately four hours to minimise disruption to services across the hospital. This involved disinfecting the pipes throughout Coalville hospital as part of our precautionary measures and continuing to flush it out until the pipe work is clean. All sinks and showers had signage to show they were not to be used, and additional water bottles for handwashing and drinking made available during that period.

- 7.3 Additional point of use (POU) filters which have been delivered to site and the remainder planned for 9 December 21. Once installed, if there are any residual bugs within the system that remain after the cleaning process, the filters will remove them. The POU filters are a temporary solution. Mitigating actions were undertaken to reduce the risk whilst the filters were unavailable

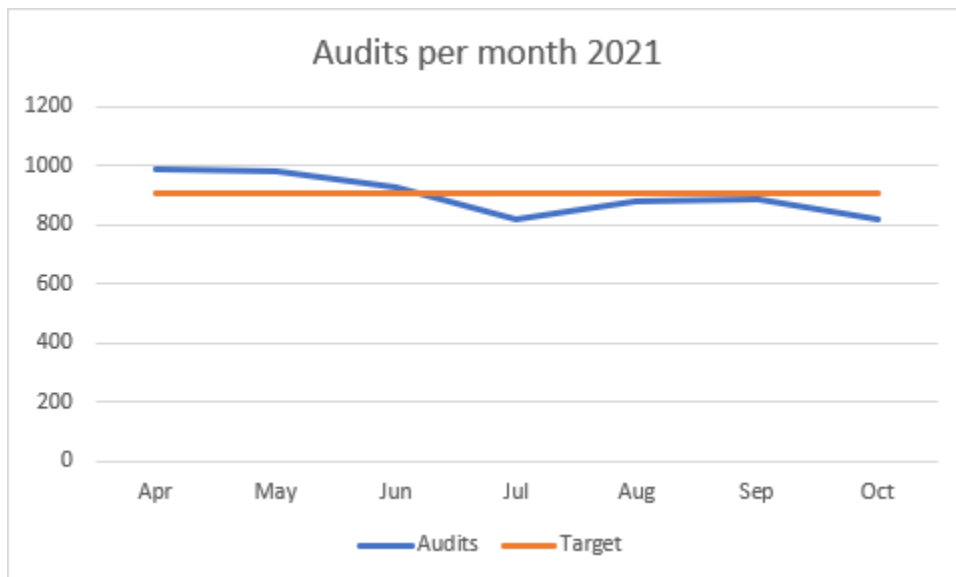
This has enabled LPT to trigger the re-sampling process, which is being arranged for GES to attend 08/12/21 Samples will take 14 days to obtain a full result. The longer-term solution will be addressed through the water management group in line with national recommendations

To note it has been confirmed that the Hawthorne centre which is based on the Coalville Community Hospital site has not been affected due to a separate water system

- 8.3 Risk 5064 has been developed and will be escalated as an organisational risk and the actions are being monitored through the Organisational Risk Register review process.

9. Hand hygiene

- 9.1 The total number of audits required per month by all teams equates to 1516 audits per month to ensure more robust representative auditing. The aim in 2021/22 was to maintain the total number of audits at 909 audits (60%).
- 9.2 In quarter 1 audits returned averaged 965 per month which dipped to an average of 863 for quarter 2. Quarter 3 data has started with a return of 821 audits for October 2021. Analysis and feedback have shown that this has been impacted by staff working from home, changes to link IPC staff and staffing challenges affecting time to audit and input. Every effort is being made to return the figures back to the expected level.
- 9.3 The graph indicates that despite all challenges faced that the number of audits remains close to, although slightly below the expected number of returns. Work continues to improve and sustain the number of audits and representativeness acknowledging the impact of staff working from home.



- 9.4 The quality improvement project aimed to improve adherence in handwashing as part of safe infection prevention and control practice across services in the organisation and for the Trust to increase the number of audits whilst maintaining an 85% compliance rate. The project is being supported through the Trust Quality Improvement Knowledge hub. The improvement interventions focused on data cleansing and quality, working with the directorates to improve accuracy of recording and governance monitoring. It also aimed to refocus mind sets and behaviours and the importance of hand hygiene. This is a continuous improvement cycle with a new reporting suite will be available by the end of Quarter 3.
- 9.5 In terms of practice and results of the audits, there has been sustained compliance performance for the year at 99%. It is anticipated and expected that as the number of audits increase there may be a decline in the overall performance as it is a more reflective representation of clinical practice.
- 9.6 The Trust Infection Prevention and Control team continue with the in-patient clinical support visits that include a quality assurance review of hand hygiene practice and adherence to Personal Protective Equipment (PPE).

10. Cleaning

- 10.1 Cleaning scores are audited bi-monthly and reported through the Trust IPC Group. Exceptions are highlighted with mitigation and actions to remedy included in the report. Work continues to ensure clinical leaders are present at the time of the audits to confirm and challenge as appropriate. In line with the national recommendations, two hourly touch point cleaning was implemented within inpatient areas. This process supported the reduction in outbreaks of infection, with specific reference to Covid-19. This process has been documented and audited to provide assurance. A business case was developed and a roving team for cleaning supported the introduction of a third clean as well as a quick response to outbreak/cleaning requirements.
- 10.2 A programme of work and actions continue to be put into place to address the issues identified from the audits of the cleaners' rooms and equipment. All areas have been provided with new cleaner's

trolley's which include a lockable cupboard to store COSHH products; to maintain the health and safety of the occupants of the areas being cleaned.

- 10.3 The Trust has a twelve-month rolling deep clean programme in place and progress is monitored at the IPC Group and LPT monthly cleaning meeting, again this has been delayed due to the pandemic. Monitoring continues through the IPC group meeting.
- 10.4 The recent publication of the updated National Standards for Healthcare Cleanliness 2021 states that healthcare establishments must be able to demonstrate how and to what standard they are being cleaned. A programme of work has been developed to implement and monitor the levels of the standards. Reporting will be through the IPC group meetings.

11. Decontamination

- 11.1 During the review of several risks on the risk register, it was identified within Community Health Services that the risk regarding the decontamination processes for the Podiatry services, had not been reviewed for some time. The following issues were picked up:
- Decontamination compliance was audited in 2016 and then the actions had not been progressed
 - There had been no further audit since 2016
 - A risk was raised by the service lead in 2017, number 921. This risk should have been monitored through the directorate governance arrangements however, we have no access or data to support this.
 - There has been no Decontamination Authorised Engineer audit for 3 years
 - Lack of evidence within podiatry staff recording equipment compliance checks
 - Lack of training on decontamination requirements
- 11.2 The following reasons were identified for the above gaps:
- Change in service leads within podiatry and CHS management
 - Change in FM provision
 - Volume of work
- 11.3 Following the issues being identified a series of meetings and the following actions have been completed:
- Risk assessment placed on the risk register – Score 6
 - Dirty to clean workflow system in place
 - Staff have access to single use instruments where risk is high i.e., contact with tissue fluid
 - Where washer disinfector not available there is a separate sink and appropriate PPE for staff in place to scrub instruments
 - Instruments are all cleaned in a separate room to clinic room
 - Steam sterilisers are validated and maintained and operated in accordance with the HTM2010
- 11.4 The current known gaps in controls have been identified as:
- For some autoclaves there is an inability to empty the reservoir at the end of the day posing infection control risk due to stagnant water
 - Washer disinfector not available in all clinics
 - Missing documentation of the temperature recordings and holding times of the autoclaves

- 11.5 Several actions have been identified and are currently being developed and updated, with monitoring through the IPC group and the CHS governance route. These include, but not limited to:
- Audits to start on 1st December 2021 and complete by the end of January 2022
 - Re-establishing the decontamination group with the first meeting scheduled for January 2022
 - CHS decontamination operational meeting commencing 9 December 2021
 - Roles and Responsibilities for Decontamination defined and agreed by January 2022
 - Training needs analysis to be agreed in January 2022
- 11.6 A paper was submitted to the Strategic Executive Board meeting on the 3 December 2021 for oversight of the identified risks and actions with further detail.

12. Antimicrobial stewardship

- 12.1 Antimicrobial stewardship is reported to the Trust IPC group every six months, with associated annual reports and audits including prescribing and consumption.

Proposal

This six monthly 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. The report also highlights the impact of the COVID-19 pandemic to the business as usual IPC work programme and quality improvement in response to NHSE & I IPC visits.

Decision required

The board 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 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: Paper sponsored by:	Trust Board	
	Anne Scott – Executive Director of Nursing, AHP and Quality	
Paper authored by:	Amanda Hemsley – Lead Infection Prevention and Control Nurse	
Date submitted:	9.12.21	
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	Direct to trust board	
	6 monthly report	
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