

Public Trust Board – July 2023

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 currently has 5.1 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) has been updated by NHS England (NHSE) in September of this year. This document is intended to support the organisation in responding in an evidence-based way to maintain the safety of patients, service users and staff.

Whilst the United Kingdom Health Security Agency (UKHSA) guidance for the application of measures of Infection Prevention and Control in response to the SARS-CoV-2 pandemic was archived at the end of April 2022, the intention is that the BAF combined with the National Infection Prevention and Control Manual for England (April 2022) will support the trust to develop, review and support internal assurances.

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.

Publication of a further Board Assurance Framework (BAF's) in April 2023 replaces the previous BAF's which centred predominantly around Covid-19 and IPC. The most recent publication is in line with the National Infection Prevention and Control Manual (updated April 2023) and contains 160 Key Lines of Enquiry (KLOE's). A meeting was held with representatives from all directorate and enabling services where the BAF is reflective of the service. The meeting identified the actions required and the assurances required to meet the KLOE's. The compliance with the BAF will be reported through the bi-monthly IPC assurance group to outline progression and any barriers.

Analysis of the issue

1.0 COVID-19 pandemic

1.1 With an increase of COVID-19 and Influenza during the autumn into winter 2022/23 there have been a number of recent guidance publications. Appendix 1 maps the number of COVID-19 cases with the updates in IPC guidance and response/changes to practice since April 2022.

1.2 Between 1st January 2023 and 31st May 2023, LPT recorded 24 COVID -19 outbreaks, including incidents that occurred in non- clinical areas affecting staff only. 17 of the outbreaks occurred in Community Health Services and 6 occurred in Directorates of Mental Health, Families and Young People and Learning Disabilities Services. 1 was a staff only outbreak at Bridge Park Plaza.

1.3 COVID-19 figures from 1st January 2023 – 31 May 2023:

Total number of COVID-19 patient cases = 191

- Total number of COVID-19 cases 0-2 days = 15
- Total number of COVID-19 cases 3-7 days = 54
- Total number of COVID-19 probable nosocomial cases = 41
- Total number of COVID-19 definite nosocomial cases = 81

1.4 36% of the COVID-19 cases were attributed to community onset, picked up by screening. The remaining 64% cases are nosocomial healthcare acquired. Reviews of each case have identified learning in line with the regional picture. Discussions with NHSE advise that some areas have increased numbers, but that benchmarking with other trusts is not advised due to a number of variables.

1.5 The COVID-19 pandemic continues to be flagged at level 2, COVID-19 is in general circulation, but direct COVID-19 healthcare pressures and transmission are declining.

1.6 A review of all patients within LPT whose death was associated with COVID-19 is still undertaken.

1.7 The use of Personal Protective Equipment is in line with the National Infection Prevention and Control Manual 2023.

2.1 Decontamination

2.1 A Quarterly decontamination meeting is in place with the first 3 meetings having taken place. Membership of the group includes, Medical Devices, Estates, Health and Safety, Podiatry and Dental services. Terms of reference are in place and the group reports to the Infection Prevention and Control Assurance Group.

2.2 LPT owned sterilisation equipment and washer disinfectors 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 and 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

2.3 The second phase of an Authorised Engineer(AE) review of management processes was due to commence earlier this year, however due some communication issues with the current provider,

we will be reviewing our contract and looking to scope the option of a new AE. Currently this does not affect the assurance of the management of the machines.

- 2.4 Sourcing for a contracted Dangerous Goods Safety Advisor (DGSA) is currently in progress with quotes received for these services through procurement.
- 2.5 The action plan for Serious Incident report regarding pharmacy continues to be monitored through the Decontamination meeting and any areas of concern escalated to the Community Hospital Services Clinical Governance team and through the IPC assurance route.

3.0 Legionella

Scoping for Legionella across our community hospitals is ongoing and determined the following results so far:

3.1 Loughborough Community Hospital

Water testing results taken in the 1st week in November 2022 for Phase 2 of Loughborough Hospital were identified as positive for Legionella. An emergency meeting was arranged with all key staff on site and the Trust Water Safety Group. A risk review of water activities was undertaken which identified:

- Point of use (PoU) filters installed - All filters fitted by Thursday 17 November, which would deem the water safe.
- A review of the pipework to understand how the different areas received their water feed was implemented as this would inform the remedial work of cleaning/chlorinating the system.
- Meetings were held on a daily basis and included all external services who are delivering services within the building. As part of the ongoing planned preventative maintenance, phase 1 of the hospital was sampled.
- Legionella bacteria non pneumonia (Anisa) was detected in 63% of the samples taken.
- Due to the age of the outlets in order to fit T-Safe filters the majority of the outlets had to be changed to new fittings.
- The majority of phase 1 is now fitted with T-Safe filters. All actions identified at the Rutland ward incident were also replicated at Loughborough hospital where applicable and appropriate.
- Due to resource levels and the higher risk of Serogroup 1 in Phase 2 the disinfection of phase 1 will take place after the phase 2 is under control.
- The Renal unit (high risk vulnerable patient areas) has no positive Legionella samples and is on an independent supply from both phase 1 and phase 2. The Lead Consultant Microbiologist from University Hospitals of Leicester has attended all meetings and continues to support the processes and attends LPT's Water Safety Meetings.
- Phase 1 and Phase 2 of this work is ongoing to maintain monitoring of levels and safety.

3.2 Rutland Memorial Hospital

In June 2023 all the hospital was clear of Legionella expect for 5 positive results in the Rutland Ward outlets, all positive outlets have T-Safe filters. Further work is ongoing with outlet cleaning and samples being taken.

3.3 Coalville Community Hospital

- Capital projects identified five positive outlets in preparation for tap change.

- Chlorine levels checked and the CLO2 system is working.
- CLO2 contractor to check the chlorine levels in the positive outlets on 22nd June.
- Legionella samples to be taken after the outlets have been changed by Capital Projects.

4.0 Seasonal Flu vaccination programme – interim update

- 4.1 All frontline health care workers, including both clinical and non-clinical staff who have contact with patients, should be offered a flu vaccine as part of the organisations' policy for the prevention of the transmission of flu to help protect both staff and those that they care for. LPT maximise the opportunity for colleagues to receive their flu vaccination close to where they live or at their workplace.
- 4.2 For context, the flu vaccination programme runs between October and February every year. The flu vaccination programme ran alongside the staff Covid-19 vaccination booster programme for the Autumn delivery 2022 / 2023. The LPT staff flu vaccination programme commenced on 3rd October 2022 and offers the 18 – 64 vaccine and the 65+ vaccine.
- 4.3 The staff flu uptake in March 2023 was 53.5%. The figures for National, Midlands and local Trusts are presented for context.

Regional uptake	%
National	51.9%
Midlands	51.8%
LPT	53.5%
NHFT	50.4%
UHL	46.6%

- 4.4 The flu vaccination programme for staff has been delivered alongside COVID-19 vaccinations to promote uptake of both vaccines for LPT staff where it is operationally viable.
- 4.5 The co-delivery vaccination programme has been offered at the two LPT vaccination sites – Loughborough and Fielding Palmer Hospitals to all LPT staff.
- 4.6 Delivery of the programme is through a team of roving vaccinators and local clinical peer vaccinators and delivery is incentivised at the point of vaccination with flu incentives: pen, KitKat and stickers.
- 4.7 Recording of flu uptake is through NIVS, and the uptake reported national through the Foundry reporting mechanism. This is a reduced source of information compared with previously as the data provides staff data for the Trust by employee staff group, gender, age and ethnicity only and does not enable data at a local or team level. Details from Foundry include all LPT staff vaccinated regardless of where they had their flu jab – LPT site, GP or community pharmacy.
- 4.6 The use of the QR code to enable staff to confirm when they had received their flu jab was developed to allow a more detailed analysis of uptake by Directorate and team. This has been incentivised with a monthly prize draw but has not produced the uptake anticipated.
- 4.7 The seasonal flu vaccine for staff is being delivered using a multi-faceted approach to support flexibility and access opportunities for staff. The clinics are delivered in clinical settings and non-clinical environments to maximise uptake and opportunity. This programme of delivery is

augmented by clinical peer vaccinators delivering clinics and vaccination opportunities to their colleagues.

- 4.8 From mid November vaccination delivery had a change of focus by 'taking the vaccine to the point of work'. The vaccinator teams are working across all clinical inpatient wards and settings to maximise the opportunity to make very contact count.

5.0 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 1st January 2023 to March 2022 is zero. To date the trust have had 0 reportable infections.

5.3 Clostridium difficile infection (CDI) rates

Currently the trust has not been issued with a trajectory for 2023/24 by the Integrated Care Board (ICB). Cases for CDT are:

1st January – 30th March 2023

Jan – Clarendon ward, Evington centre
Jan – Charnwood ward, Loughborough Hospital
Jan – Ward 1, Coalville Community Hospital
Feb – Clarendon ward, Evington Centre

1st April – 30th June 2023/24

Apr – Beechwood ward, Evington centre
Apr – East ward, Hinckley & Bosworth
Apr – East ward, Hinckley & Bosworth
Apr – Clarendon ward, Evington centre
May – Clarendon ward, Evington centre
Jun – Clarendon ward, Evington centre
Jun – North ward, Hinckley & Bosworth
Jun – Dalglish ward, Melton

- 5.4 All episodes of MRSA bacteraemia and CDI are identified 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. Due to the increase in numbers of CDI infection in a quarter an in-depth review is ongoing to identify any key components that have impacted on creating this increase. Both regional and national figures for CDI in both acute and non-acute trusts have seen an increase and are reflective of LPT's experience.

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 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.

5.6 Gram Negative Blood Stream Infection (GNBSI) rates

The NHS Long Term Plan supports a 50% reduction in Gram-negative bloodstream infections (GNBSIs) by 2024/25. To help NHS systems achieve this, NHS England have developed a GNBSI reduction toolkit: a collection of guidance notes, actions and resources to support reducing GNBSI.

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 Infection Prevention and Control Assurance Group Meeting.

5.8 The nationally planned workstreams initially halted due to the pandemic to look at improving the reduction in rates have now recommenced.

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 inaugural Ventilation Safety Group (VSG) took place in May 2021 and has met subsequently at 2 monthly intervals to provide the foundation for ventilation compliance discussions in the Trust. The Terms of Reference and Ventilation Policy documents have been prepared and approved accordingly. Attendance is from key representatives across the Trust.

6.3 The VSG has worked to progress key fundamental governance requirements in support of safe spaces for patients, staff and visitors. The group focus includes: HTM and Policy updates; statutory compliance; advice during pandemic; requests for change of use; matters arising from current operational use of spaces; and examination of potential new products to the market for use in LPT.

6.4 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.

6.5 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.

- 6.6 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.

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.

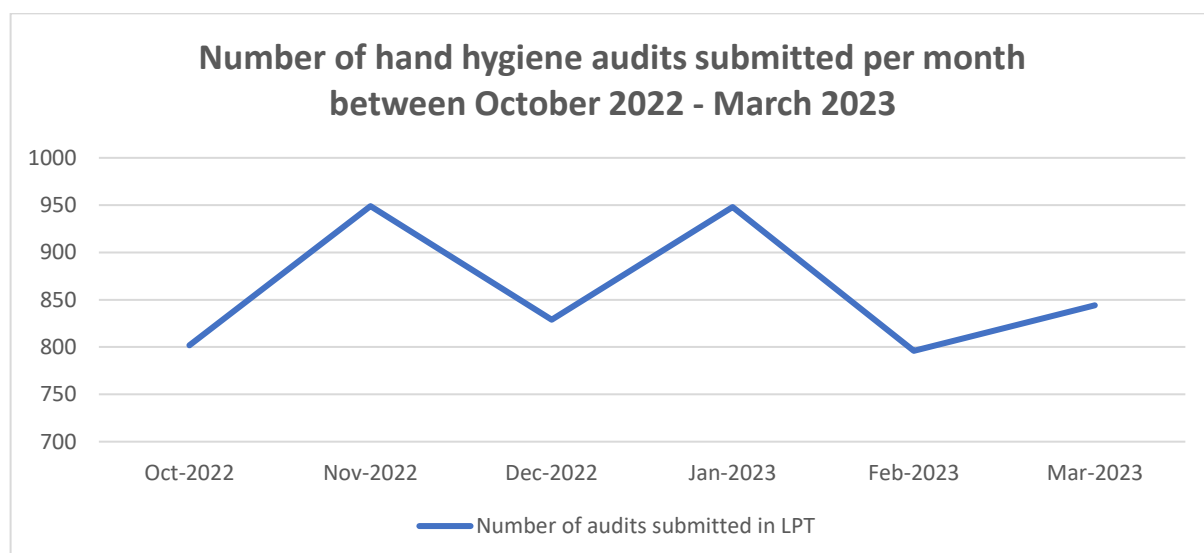
Water Management

- 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.
- 7.3 As there were no assurance, maintenance or checking from the previous external contractor via UHL, LPT has instigated compliance checks for water systems across all sites. Overall, compliance is rapidly improving, however the concerns remain around legacy maintenance which are being addressed through the FM Transformation work and appointments to new LPT estate maintenance roles. It remains an estates priority to achieve compliance, which is observable through increased checking and monitoring of temperatures etc, being undertaken in accordance with the Water Safety Plan. Furthermore, contracts are being established for maintenance and cleaning tasks.
- 7.4 As a consequence of enhanced monitoring and checking, there are notable issues which have required immediate attention to rectify which have provided inevitable cost pressures. The WSG continues to focus on the legacy matters around maintenance and address issues, accordingly.
- 7.5 Key achievements in the period include:
- Rectification of legionella issues identified through active monitoring and capital delivery processes, across LPT estate.
 - Improvement in the visibility of data, enabling the direction of tasks to be focused.
 - Completion of Water Risk Assessments (WRA) across Trust sites.
 - Commencement of actions arising from WRA, on priority basis.

- Installation of Chlorine Dioxide unit at Coalville Community Hospital as part of rectification measures to address water quality. Coalville site now clear of legionella.
- Planned installation of Clox unit at Loughborough to disinfect Phase 2 pipework. Accordingly, filters fitted where required.
- Flushing water records maintained, through Facilities and during Capital projects

8.0 Hand hygiene

- 8.1 Hand Hygiene Audits have now moved onto AMaT. The updated total number of audits required per month by inpatient teams for 2023/24 equates to 485 audits to ensure more representative auditing. For community teams, the expectation is that each staff member is audited at least once annually due to the continued agile and hybrid working.
- 8.2 Previously, the total number of audits required per month from teams equates to 1516 audits to ensure more representative auditing. The aim for 2022/23 was to maintain the total number of audits at 909 audits (60%) due to the continued agile and hybrid working impacting on numbers of audits.
- 8.3 Quarter 3 (Q3) returned an average total of 860 hand hygiene audits and Quarter 4 (Q4) increased slightly to 863. Although this is an improvement, Q3 and Q4 remained under the expected average (at that time) of 909 audits.
- 8.4 The graph below indicates that the number of hand hygiene audits being completed between Q3 & Q4 fluctuated substantially, in some months audit numbers exceeded the expected target of 909 audits. This is an improvement in comparison to Q1 & Q2. It is hoped that with the new audit expectations, teams will continue to exceed the expected number of audits per month moving forwards.



- 8.5 Hand hygiene audit reports are accessible via StaffNet and are shared monthly at the IPC group meetings. 2 reports are available to view: Hand Hygiene Insight & Hand Hygiene Submissions by Team. Directorate leads can also access these reports for their ward/areas on AMaT. This enables directorates to acknowledge good practice and/or address any concerns which need to be included in their IPC highlight reports, shared at the bi-monthly IPC Assurance Group meetings.

- 8.6 There has been sustained compliance performance in terms of practice and results of the audits with a pass rate of 99% in Q3 & Q4. Despite hand hygiene audit pass rates being high, unfortunately there are sometimes conflicts with other audits e.g., IPC environmental audits where staff are identified as not being BBE. Therefore, it is not necessarily a true reflection of clinical practice. Work is undergoing with IPC links as face-to-face training has resumed and is being delivered to help promote and improve hand hygiene levels.
- 8.7 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).

9.0 Cleaning

- 9.1 Following the transfer of services from the previous host to LPT, it was identified that the National Standards of Healthcare Cleanliness (NSoHC) had not been implemented despite previous assurances. Until the NSOHC were fully implemented, audits were not representing the requirements of the standards; however the standards were fully implemented by April 1st, 2023. Auditing in accordance with the new responsibilities framework and schedules has commenced and the first audit outcomes were submitted to the IPC assurance group in June 2023. The next steps include moving from paper-based auditing methods to electronic systems to increase efficiency, detailed analysis (trend/theme), live data and early warning systems for rectification.
- 9.2 In line with the national recommendations, during Covid-19 peaks, 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 and has been documented and audited to provide assurance. This action has since been reduced universally and is applicable in outbreak areas only.
- 9.3 Following transfer of services from the previous host to LPT, it was identified that there were considerably more vacant facilities (catering, cleaning, deep clean, porters, waste management, rapid response, reception, supervisors) posts as well as a higher number of sickness absence cases. A recruitment plan has been implemented and has been successful, in the meantime, vacancies are covered through overtime, agency and bank.
- 9.4 Since the transfer of services, the 'cleaners' cupboards' auditing has not been fully implemented; however this is an action for the team to implement in Qtr. 2, 2023/24. The audit documentation will be reviewed by the Estates and Facilities team in collaboration with the IPC team.
- 9.5 The Trust has a twelve-month rolling deep clean programme in place; however due to the high volume of vacancies within the Estates and Facilities team, the 'Deep Clean' team within Estates and Facilities have been utilised to cover the rapid response team and attend/support outbreak areas. The deep clean schedule is approximately 10 weeks behind plan which has been highlighted as a risk. However, a new plan has been developed in conjunction with the Estates and Facilities team (prioritising any areas that had not been completed in the previous 12-month period) and shared with the IPC assurance group and is currently on track.

- 9.6 The monthly facilities forum has been suspended due to resourcing issues and the prioritisation of transfer of services back to LPT . However, we expect to be able to resume the facilities forum in the Q. 2 when staff are onboarded.
- 9.7 LPT has purchased equipment to replace the existing broken/redundant equipment identified during transfer preparations. The distribution of this equipment was rolled out to all areas in November 2022. Further equipment was also purchased to replace any old and broken equipment, along with maintenance contracts to ensure timely repair and/or loan items to continue with full service. This has improved the morale and productivity of the teams and has reduced moving and handling incidents.
- 9.8 All Facilities Management (FM) services from existing host to LPT was completed on 1st November 2022. There were several 'due process' issues which the Estates and Facilities team have managed well and work has commenced on the transformation of these services to improve standards and meet compliance requirements. Work is currently being undertaken to standardise the chemical products used in cleaning. This will not only reduce training requirements and costs but also introduce more sustainable products to meet our greener agenda. This is a collaborative project with IPC & H&S team.

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 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:	Trust Board	
Paper sponsored by:	Dr Anne Scott – Executive Director of Nursing, AHP and Quality	
Paper authored by:	Amanda Hemsley – Lead Infection Prevention and Control Nurse	
Date submitted:	12 July 2023	
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):	Direct to trust board	
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

Appendix 1

A graph to show the number of COVID-19 cases alongside the updates in IPC guidance since April 2022

