

Director of Infection Prevention and Control Annual Report

April 2020 – March 2021

Foreword DIPC Report 2020/1

We would like to preface this annual report to acknowledge what an unprecedented and challenging year this has been for all our staff and patients. This last year has been exceptional in so many ways. We have sought to ensure we keep all staff and patients safe with stringent Infection Prevention and Control measures in place across the Trust including supporting staff with the additional burden of wearing Personal Protective Equipment for over 12 months.

The global COVID-19 pandemic has required us all to stand together, shoulder to shoulder, supporting each other on an ever moving emotional rollercoaster.

We would like to thank each and every member of staff for their contribution to keeping our services staff, wherever they work. This includes all clinical and non-clinical staff including our wonderful domestic and housekeeping staff without who we could not have delivered such high standards. Thank you.

However, we know that sadly we have tragically lost 3 members of our workforce:

*Margaret Tapley, Health Care Assistant at Witney Community Hospital
Elisha Olaomo, Deputy Ward manager at Whiteleaf Centre and
Eddie Chua, Staff Nurse, Marlborough House, Forensic services*

They were highly valued and deeply caring members of the nursing family. Colleagues continue to mourn their loss. We will personally remember their unique contributions.

Our compassion, caring and professionalism has never been more apparent and needed to ensure our patients and service users continue to receive the best standards of care possible. Thank you to every member of staff at Oxford Health.

*Marie Crofts,
Chief Nurse, Director of Infection Prevention and Control and*

*Helen Bosley,
Nurse Consultant, Infection, Prevention and Control*

Director of Infection Prevention and Control (DIPC) Annual Report

Executive Summary:

Each year the Director of Infection Prevention and Control (DIPC) is responsible for producing an annual report. The purpose of the report is to inform the Trust Board of progress in delivering the Infection Prevention and Control Programme. This includes providing assurance to the Trust that appropriate measures are being taken to maintain the safety of patients and staff and to agree the action plan for sustained reduction and improvements in Healthcare Associated Infections (HCAI) in 2020/21. The following report provides assurance on the Infection Prevention & Control Programme and activity for 2020/21. However, 2020 has been dominated by the COVID-19 global pandemic and the Infection Prevention and Control team (IPCT) have been forefront in leading the Trust response.

Summary of key achievements:

- Leading Trust wide response and management of COVID-19 global pandemic
- The Trust remains compliant with the Health and Social Care Act: Code of Practice for Health and Adult Social Care on the prevention and control of infections and related guidance (The Hygiene Code) and CQC regulation 15
- All inpatient areas and other high-risk areas had annual infection prevention and control audits, which measured compliance with standards of infection prevention and control practice. Audit results demonstrated sustained improvement
- Resources and controls to support the prevention and control of infections are in place and the level of assurance is high. Assurance is provided through implementation of the annual work programme with quarterly reports and exceptions reported to the Infection Prevention Control and Decontamination Committee (IPCDC) and Trust Quality- Safety Committee
- Collaborative health economy meetings between partner organisations to discuss and review *Clostridium difficile* infections (CDI) and MRSA/MSSA bacteraemias to identify joint learning
- Infection prevention and control education continues to be a priority with mandatory training being provided to all Trust staff as E-learning, workbooks and online training via teams based as per the training matrix
- Wider teaching involvement including, care certificate, IV therapy and Personal Protection Equipment (PPE) champions

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1. Introduction

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

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

2. Overview of infection prevention and control activities during 2020/21

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

- Marie Crofts, Chief Nurse and Director of Infection Prevention and Control
- Helen Bosley, Nurse Consultant Infection Prevention and Control (1.0 WTE)
- Sue Baldwin, Senior Infection Prevention and Control Nurse (1.0 WTE)
- Sarah Thorpe, Senior Infection Prevention and Control Nurse (0.6 WTE)
- Julia Marren, Infection Prevention and Control Nurse (0.8 WTE)- seconded developmental post (started January 2021)
- Lindsay Powell, Team Administrator (0.6 WTE)
- Consultant Microbiologist, via service level agreement (SLA) Oxford University Hospital Foundation Trust (OUHFT)

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

3. Governance arrangements

3.1 Reporting to the Trust Board

The IPCT provides weekly updates through the Health Acquired Infections meeting (chaired by the Chief Nurse and DIPC) to the Trust and the weekly review meeting, chaired by the Deputy Chief Nurse. The DIPC also reports directly any issues by exception to the Board or through the governance structure. During the pandemic additional reporting structures have been in place including extraordinary COVID-19 assurance meetings, gold command and silver tactical meetings weekly. The frequency of these meetings has been carefully adjusted and flexible to meet Trust requirements.

3.2 Infection Prevention, Control and Decontamination Committee (IPCDC)

The Trust has an Infection Prevention, Control and Decontamination Committee (IPCDC) which meets every quarter. In 2020/21 it met on 1st May 2020, 16th July 2020, 29th October 2020 and 21st January 2021. The IPCDC is accountable to the Quality and Clinical Governance subcommittee.

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

4. Policy and Procedures

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

Procedures reviewed, updated and approved during 2020-21 were: -

- Outbreak management including COVID-19 response
- Chickenpox & Shingles Procedure
- Specimen Collection and Transportation Procedure
- Management of Patients with Hepatitis Viruses and the Human Immunodeficiency Virus
- Group A *Streptococcus* Infections
- Management of Parasitic Infestations
- All these procedures and 'At a Glance' guides are available to staff via the Infection Prevention and Control intranet page.

5. Local service improvement

5.1 Infection prevention and control intranet page

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

COVID-19 - In response to the COVID-19 pandemic a dedicated PPE and IPC page was created which is reviewed and updated daily as required. The IPCT have worked closely with the Trust communications team throughout the last 12 months to ensure all relevant information for staff is collated and held in one easy to find place. Direct links to the dedicated pages are available through the twice weekly communications bulletin (daily through the height of the pandemic) in order that all staff have immediate access to any changes in IPC/ PPE guidance.

5.2 Adenosine triphosphate (ATP) testing

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

Unfortunately, at the beginning of the pandemic, the company changed the IT recording system for the product. This has resulted with staff needing to be retrained in the new system as well as working with our Trust IT systems to ensure access and information can be submitted. This has resulted in long delays and months where ATP data has not been provided. There is ongoing monitoring and further action is in place to ensure any issues are being addressed.

5.3 MRSA screening

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

5.4 Health economy partnership

The Trust continues to develop and work collaboratively with other healthcare providers. This includes:

- use of the patient inter healthcare transfer form,
- attendance at other Trusts' infection prevention and control meetings (i.e. OUHFT, Oxfordshire Clinical Commissioning Groups (OCCG) and Buckinghamshire Clinical Commissioning Groups)
- learning from incidents review meetings
- daily system calls

Covid -19 has raised the need to work collaboratively and at pace at all times with system partners. Improved communication and patient flow have highlighted the improved outcomes for patients and their families when the system works together.

Although some 'business as usual meetings have not taken place during 2020, due to pressures of work, these partnerships have been vital during the pandemic. The IPCT have been actively engaged in maintaining and expanding networks locally, regionally and nationally. This has included:

- weekly DIPC meetings from Buckinghamshire, Oxfordshire and Berkshire (BOB) healthcare providers and commissioners
- regional and national meetings with NHS England and Improvement (NHSE/I).
- national personal protective equipment workstream, and specialist mental health forums.

5.5 Sepsis Pathway

The Trust continues to ensure that staff are aware of the risks of sepsis. NEWS2 documentation continues to be embedded within the Trust with explicit reference to the Sepsis Six and its application in both community and inpatient settings. The introduction of an electronic version of the NEWS 2 Tool is being tested in the 'sandpit '. Staff have been undertaking the national eLearning programme on NEWS2 and additional workbook resources have been developed to support staff competency. As part of a response to managing the global Covid 19 pandemic the development of a Trust 'Sepsis strategy' aimed

at improving awareness and responsiveness in the recognition and management of sepsis has been paused. It is anticipated that this and the production of a 'sepsis awareness' video as part of the Trust induction programme' will recommence in 2021-22 and to this end the NEWS2 Steering group has been re-established.

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

6.1 MRSA bacteraemia

There have been no cases of MRSA bacteraemia this year, which is one less than 2019-20.

6.2 MSSA bacteraemia

There have been three cases of MSSA bacteraemia identified. Full root cause analysis (RCA) were completed. Two were Trust inpatients and the likely source was a urinary catheter and pressure ulcer respectively. One case was a community patient seen in Emergency Multidisciplinary Unit (EMU) and the likely source was a foot ulcer. There were three cases in 2019-20- two community cases and one Trust acquired.

6.3 Gram negative organism bacteraemias

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

6.3.1 E.Coli bacteraemias

Targets have been applied to *E.Coli* bacteraemia cases to reduce the number by 50% by 2023-4. There were 21 cases of *E.Coli* bacteraemia patients identified in the Trust. Eleven cases were for inpatients, and 10 were community patients seen in EMU. The likely sources were urinary tract, biliary, leg ulcers, discitis and chest. This is an increase from last year when there was only one Trust case. This is likely to be due to the effect of the pandemic where the acuity of patients increased. All cases were thoroughly investigated using the Department of Health RCA tool. The root cause for this organism is extremely hard to determine but likely to be the urinary tract in about 50% of cases. The number of community cases has decreased from last year (17), but this may be due to more patients either not presenting till late in their illness, being very unwell and requiring secondary care treatment.

6.3.2 Pseudomonas bacteraemia

There has been one *Pseudomonas* bacteraemia cases identified for a Trust inpatient, with the likely source being a leg ulcer. There were no cases in 2019-20.

6.3.3 Klebsiella bacteraemia

There have been two cases of *Klebsiella* bacteraemia identified this year. One was a Trust acquired and one community identified via EMU assessment. Both cases had RCA's completed and the likely sources were urinary tract. There were two community cases in 2019-20.

Further work into the root causes of these infections is ongoing within the health economy.

6.4 Clostridium difficile infection (CDI)

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

In July 2013 the Oxfordshire health economy *Clostridium Difficile* Infection (CDI) monthly review meetings commenced. This meeting includes representations from OHFT, OCCG,

Public Health England (PHE) and OUHFT. Full detailed RCA's for all patients identified in the preceding month with CDI across the health economy are presented. This practice is cited as good practice by the area commissioning team.

There was no OCCG threshold for Oxford Health NHS Foundation Trust (OHFT) in 2020/21.

The final number of cases by the end of March 2021 was ten. This is an increase from the preceding year (four cases) and is likely a reflection of increased antibiotic usage, and patient acuity, during the COVID-19 pandemic. Six cases were attributed to the Trust and four were community onset.

In every CDI case, a comprehensive review of the care of the patient and the ward environment is undertaken using the Department of Health RCA tool and any learning fed back to the clinicians, wards and areas concerned. Antimicrobial prescribing is reviewed by the pharmacist and OUHFT Consultant Microbiologist to ensure appropriateness and any identified actions are taken. The RCA's are submitted to the weekly clinical governance meeting for further review and discussion. On detailed investigation there were no issues identified relating to patient care or the cleanliness of the environment for each case/ patient investigated. All cases were deemed unavoidable following external peer review.

7. Outbreaks

7.1 Norovirus Outbreaks

There has been one outbreak of diarrhoea and vomiting in the Trust during 2019/20. This occurred on a mental health ward affecting four patients and one staff. Although this was not a confirmed norovirus outbreak appropriate IPC management was provided.

7.2 Influenza Outbreaks

There have been no outbreaks of influenza this year and cases remained low.

8. COVID-19 Pandemic

On 31st December 2019, health authorities in Wuhan, Hubei, China, reported a cluster of viral pneumonia cases of unknown cause. Subsequent cases were identified.

The World Health Organization (WHO) on March 11th 2020 declared COVID-19 a pandemic, pointing to the over 118,000 cases of the coronavirus illness in over 110 countries and territories around the world and the sustained risk of further global spread.

The UK government instigated a public lockdown and restriction in public movement in 23rd March 2020 as a measure to reduce possible population transmission. The Trust has been actively responding to the COVID-19 pandemic, and the IPCT provided increased services (7 days a week) to support staff and patient safety, when required to meet service demands. The Trust response is ongoing at this time.

In response to the COVID-19 global pandemic, multiple actions have been implemented by the Trust. This response has been reviewed and updated regularly and in line with PHE guidance at all times including regional and national imperatives. Both national guidance and local Trust guidance is available on the Trust intranet pages. These include a designated COVID-19 page, and personal protective equipment (PPE) page.

Staff can access all Trust IPC procedures via the IPC page, including the Trust outbreak management procedure.

8.1 Reporting and escalation

Oversight and governance of the IPC response to COVID-19 pandemic has been through:

- Executive committee GOLD command

- COVID-19 Tactical Silver command
- Quality and Clinical Governance sub Committee
- Quality Committee
- Extraordinary Safety Committee (1st wave)
- IPCD Committee
- Weekly briefings with Chief Nurse and IPC lead
- Weekly meetings from May 2020 with Heads of Nursing re Hospital Acquired COVID-19
- Weekly Review Meeting
- Trust webinars with content to address changes and updates in IPC and PPE guidance

The IPC Board Assurance Framework (BAF), produced by NHS England and Improvement (NHSE/I) was completed and presented to Trust Board in June 2020. The IPC BAF was updated by NHSE/I in October 2020, and the Trust updated the existing IPC BAF to incorporate the additional points. This updated version was presented at the Board meeting in January 2021. It has also been sent to the CQC, HSE, CCG and NHSE/I, who requested copies. The third version of the BAF was issued by NHSE/I on 12th February 2021 and is currently being updated.

8.2 Actions and IPC response to Covid 19

Most of the below actions are standard practice in an outbreak, and staff are familiar with them. The Trust has adhered and followed national PHE guidelines throughout the pandemic. All actions have been implemented, along with regular updated guidance in response to NHS England and Public Health England guidance and recommendations. The IPCT and the DIPC were reviewing guidance on at least a daily basis to ensure the Trust were up to date.

A summary of key actions is below, however a significant amount of work has taken place throughout the pandemic and cannot be underestimated. A more detailed account on compliance and assurance with regard to national directives are located in the BAF document (Appendix 2).

A summary of responses by the Infection Prevention and Control Team include:

- Review of all national IPC guidance and implementation within all areas and services across the Trust – ensuring it was fit for purpose for all our settings
- Management and advice of personal protection equipment (PPE), including product review and evaluation
- Review of alternative products to meet demands
- Development of a significant number of educational and guidance documents to support staff in regard to IPC and PPE measures
- Close, frequent and timely contact with clinical services to support clinical practice and safe patient management, including review of specimen results. This includes additional support for community care services i.e. care home support
- Regular external collaboration with CCG, NHSE/I, PHE, secondary acute care colleagues and national teams, including attendance at various working groups and meetings
- Review and completion of IPC Board Assurance Framework, with updates as required
- Participation in regional and national working groups and forums to review IPC, PPE, testing and develop guidance to align with the output of these groups

- Review role of the Matron- including reviewing and updating of matrons IPC checklist to support local practice, IPC adherence and patient and staff safety
- Review of governance reporting to ensure appropriate escalation and discussion of IPC issues
- Introduction of PPE champions to support safe management and application of PPE. This included introduction of staff PPE competencies (recorded centrally and attached the staff training records) and production of training resources (videos, teaching presentations, information)
- Involvement in Covid-19 Serious Incidents reviews and investigations
- Involvement in COVID-19 review panels for staff cases providing expert views
- Oversight and contribution to resuming clinical services, including set up of COVID-19 immunisation centres

8.2.1 Specific Actions

8.2.1.1 Standard Infection Prevention and Control Guidance

- IPCT have produced and issued multiple versions of guidance, in response to and based on national PHE guidance, ensuring this is easily accessible on the intranet.

This continues to be reviewed weekly for any updated or new guidance.

8.2.1.2 Patient management / cohorting

- Production of patient screening flowcharts (Red, Amber, Green pathways) to reflect PHE recommendations which have recently been updated. All inpatients are screened on admission (day 1), day 3 and day 5-7 following admission
- All inpatients are screened weekly, and records kept capturing compliance, including any patient refusals
- In mental health wards, further screening guidance has been developed to manage patients leave. This consists of admission screen and rescreens at day 3 and 7
- On our CAMHS inpatient units we have introduced the use of Lateral Flow Tests (LFT's) following leave to ensure we balance the risk of transmission with the mental health risks of this patient group

8.2.1.3 Staff cohorting where appropriate

- Where possible designated cohorts of staff have been assigned to care for patients in isolation/cohort rooms/areas.
- Ongoing work with flexible workers/agencies to minimise staff movement and decrease risks of transmission during outbreak situations including screening using LFT prior to start of shift
- Substantive staff and long lines flexible workers screening commenced via lateral flow testing. Clinical staff are self-testing twice a week, and any positive results followed up by PCR testing

8.2.1.4 Cleaning of environment

- Routine environmental cleaning, using a hypochlorite-based product, is being used for all wards
- Increased cleaning (at least twice daily) of 'frequently touched' surfaces such as door/toilet handles, locker tops, over bed tables, bed rails, by domestic staff is in place
- Introduction of 'clinell time' - a involving cleaning of frequent touch points following handovers (x3 times a day) including desk phones computer keyboards, keypads, particularly where these are used by used by many staff.

- All areas have been de-cluttered to ensure they are free from non-essential items and equipment
- Terminal decontamination is undertaken following transfer, discharge, or once the patient(s) is no longer considered infectious- records kept as per normal practice
- Response to CAS Alert issued 24/12/20 and additional posters have been developed for cleaning of public /communal toilets both inside ward areas and beyond

8.2.1.5 Decontamination of equipment

- Single-use items are in use where possible
- Dedicated, reusable, non-invasive care equipment is in use and decontaminated between each use and prior to use on another patient

8.2.1.6 Personal Protective Equipment (PPE)

- Specific advice and clear guidance provided re the appropriate use of PPE as per PHE guidance – ensuring all staff wear level 1 PPE (FRSM; gloves; aprons) in clinical areas where 2 metres distancing cannot be maintained and when delivering direct patient care or higher levels of PPE where aerosol generating procedures are performed. This has recently been updated regarding amber and green areas.
- External support for FFP3 mask fit testing has been secured via National PPE Team. An external company has been appointed to support the Trust to fit test all clinical staff who may be involved with aerosol generating procedures. Going forward staff will be fit tested with several types of FFP3 masks, which will be provided by a secure supply route
- Introduction of the PPE safety buddy/champion role across Trust. This role has been undertaken by link nurses and expanded to staff in other areas i.e. estates, facilities. It is intended to provide a real support and focus to review, strengthen and support IPC practice. Supportive webinars and training have been provided.
- PPE champions are completing assessments of PPE competencies, ensuring staff are able to safely don and doff PPE and can access information and support if needed i.e. training videos, information. Records are being held locally and centrally on staff records via learning and development system. Currently we have 120 PPE safety buddies identified.

8.2.1.7 Hand washing

- Hand hygiene posters are on display in all ward, clinical and non-clinical areas to ensure appropriate hand washing
- Staff undertake hand hygiene as per WHO 5 moments, using either alcohol-based hand rub or soap and water
- Advice regarding protecting skin whilst wearing PPE and increased hand hygiene
- Hand hygiene audits in place to monitor compliance

8.2.1.8 General guidance

Multiple sets of general guidance have been produced over the last 12 months including:

- Specific guidance regarding safe practices for staff i.e back to basics, management of uniforms and community working practice. An additional flowchart for staff contacts has been disseminated and made available on the intranet. This is to help simplify the appropriate response for staff who have had contact to a positive COVID-19 case
- Guidance for car sharing and travelling to and from work

- Collaboration with external colleagues across the system to produce IPC community care guidelines for care support staff and management of patients in their own homes
- Widespread introduction of scrubs for staff who do not usually wear uniform (mental health)

8.2.1.9 Collaboration

- Weekly DIPC meeting with other provider leads across Thames Valley, chaired by CCG to update and share learning
- IPC attendance at weekly meetings hosted by NHSE/IPC regional lead
- Attendance at relevant national webinars, and specialist meetings
- Twice weekly outbreak meetings as required

8.2.1.10 Specialist and Expert advice

- Advice and site visit to support the COVID-19 immunisation delivery at the mass vaccination centres across BOB
- Advice and guidance for safe delivery and management of COVID-19 research trial
- Ongoing support and advice to clinical services, including estates, clinical services (inpatient and community)

8.2.1.11 Learning, assurance and improvement

- Weekly IPC Hospital Acquired Covid meeting led by the Chief Nurse with the Heads of Nursing
- Weekly site reporting for possible HCAI transmission is in place
- Regional and national DIPC meetings to share learning
- Monitoring of local PPE and IPC via audits, with the matrons and Heads of Nursing and cascading of any learning

8.3 Classification and incidents of nosocomial infections

Daily data review is in place with verification provided by the IPCT, prior to any national reporting.

The Trust has followed the National guidance for case classification and onset.

- Community-Onset (CO) - positive specimen date ≤ 2 days after hospital admission or hospital attendance;
- Hospital-Onset Indeterminate Healthcare-Associated (HO.iHA) - positive specimen date 3-7 days after hospital admission;
- Hospital-Onset Probable Healthcare-Associated (HO.pHA) - positive specimen date 8-14 days after hospital admission;
- Hospital-Onset Definite Healthcare-Associated (HO.dHA) - positive specimen date 15 or more days after hospital admission.

Since the beginning of the pandemic there have been 380 COVID-19 patients identified whilst inpatients on our wards. Further cases breakdown is provided in the following two (2) sections for the first and second wave.

8.4 First wave cases and activity

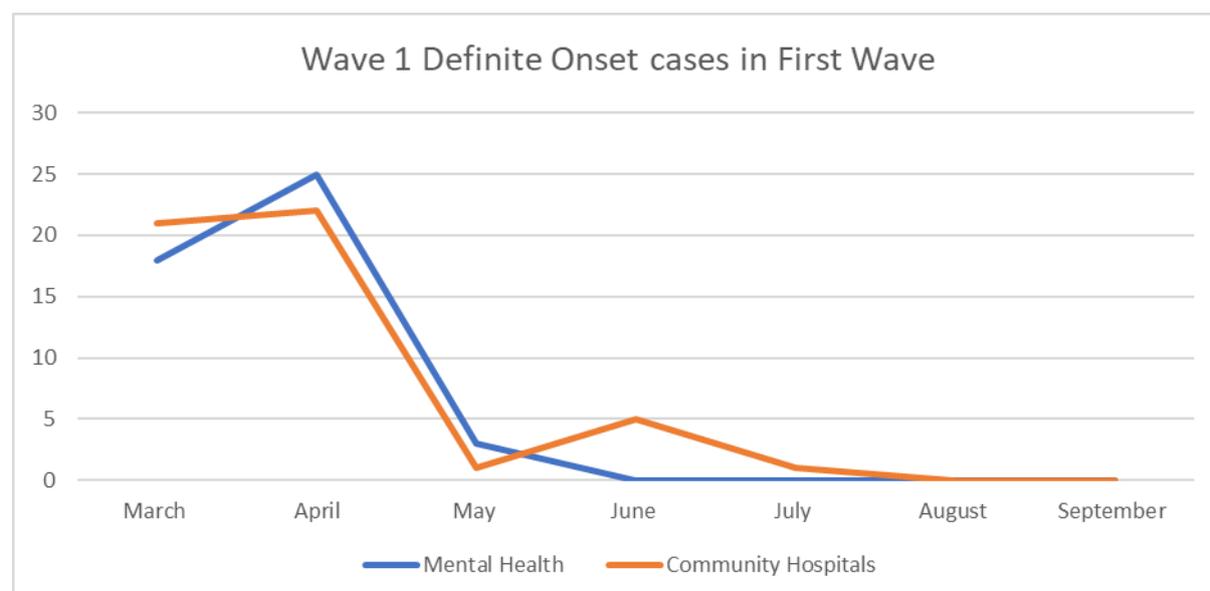
8.4.1 Cases

In the first wave from March 2020-June 2020, 181 patients were identified via screening as COVID-19 positive. Of these 181 patients, 157 recovered (86.7%). Due to the potential

incubating time for up to 14 days, patients were classified as above (8.3). In the first wave there were 96 (53%) patients classified as definite hospital onset. There were also 24 (13.2%) inpatient deaths, where COVID-19 was identified either as their cause of death or if the patient died within 28 days of a positive test.

Other existing health conditions may have also influenced the outcome. Twenty-two patients were in community hospitals and two patients were in an older adult mental health ward.

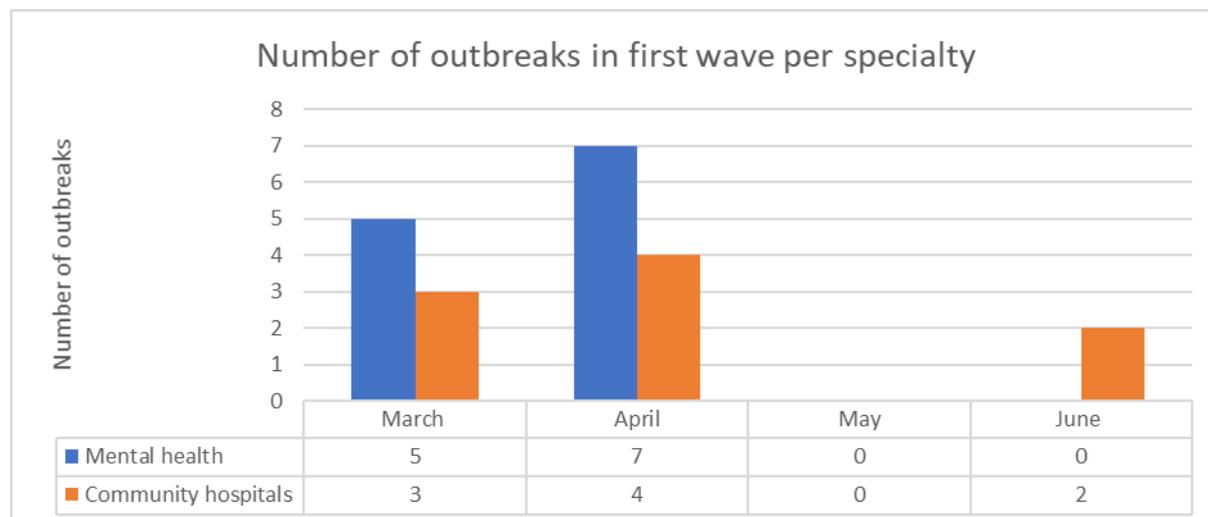
Month/Year	Onset of cases days after admission							
	Mental health/Learning disabilities				Community hospitals			
	CO <=2	HO.iHA Indeterminate 3-7	HO.pHA Probable 8-14	HO.dHA Definite >15	CO <=2	HO.iHA Indeterminate 3-7	HO.pHA Probable 8-14	HO.dHA Definite >15
March 2020	1	0	0	18	13	1	3	21
April 2020	6	0	5	25	25	10	11	22
May 2020	0	0	0	3	6	3	0	1
June 2020	0	0	0	0	2	0	0	5
July 2020	0	0	0	0	0	0	0	1
Total	6	0	5	46	46	14	14	50



There were no COVID-19 cases in August and September 2020.

8.4.2 Outbreaks

All outbreaks are reported to PHE, NHSE/I and the CCG. There were 21 outbreaks during the first wave.



8.5 Second wave cases and activity

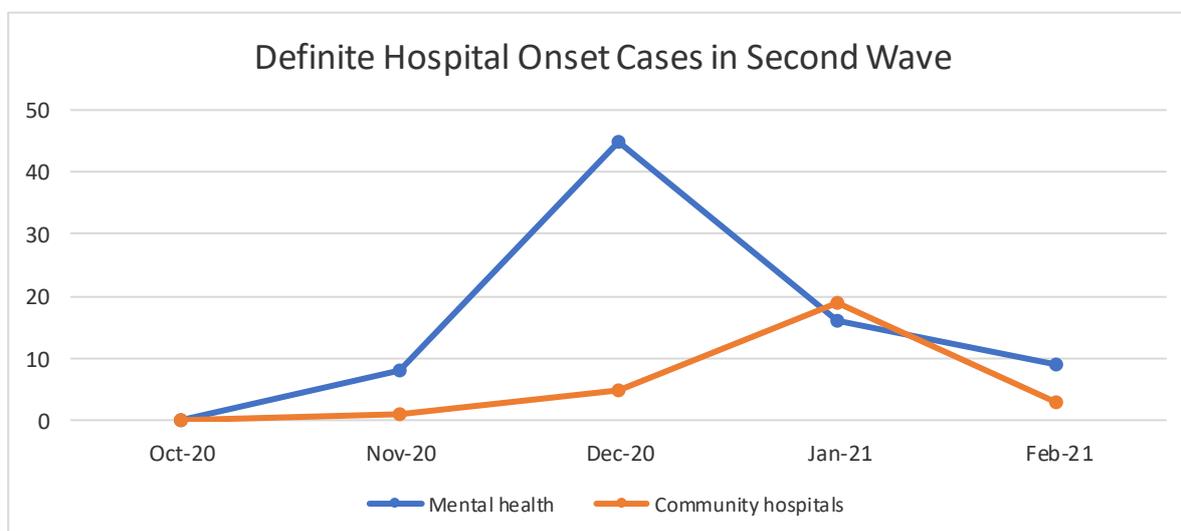
8.5.1 Cases

The second wave was from October 2020 -March 2021. In this wave 200 patients were identified via screening as COVID-19 positive. Of these 200 patients, 192 recovered (96%). Following the national classification there were 106 (53%) patients classified as definite hospital onset. This was an increase in cases and may be due to the emergent COVID-19 variant in the second wave, which was deemed more transmissible.

There were eight (4%) inpatient deaths, where COVID-19 was identified either as their cause of death or if the patient died within 28 days of a positive test. All eight patients were community hospital patients and other existing healthcare conditions may have influenced the outcome.

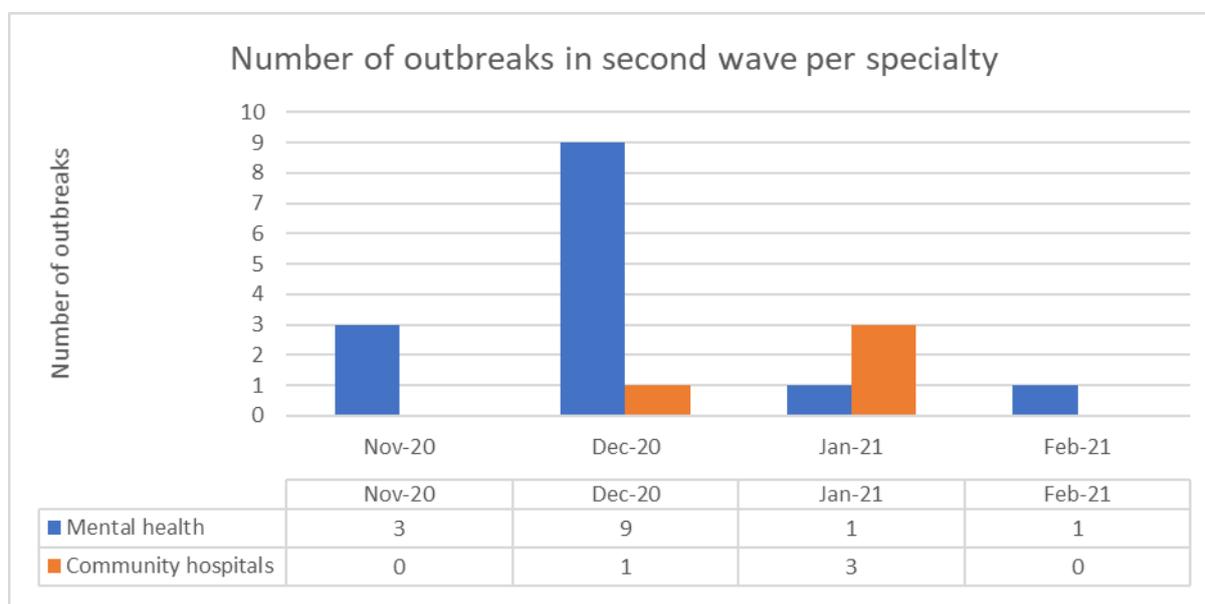
Month/Year	Onset of cases days after admission							
	Mental health/Learning disabilities				Community hospitals			
	CO <=2	HO.iHA Indeterminate 3-7	HO.pHA Probable 8-14	HO.dHA Definite >15	CO <=2	HO.iHA Indeterminate 3-7	HO.pHA Probable 8-14	HO.dHA Definite >15
October 2020	0	0	0	0	1	0	0	0
November 2020	1	0	1	8	0	0	1	1
December 2020	0	0	1	45	3	3	2	5
January 2021	1	1	3	16	16	3	3	19

February 2021	1	0	1	9	1	3	1	3
Total	3	1	6	78	20	9	7	28



8.5.2 Outbreaks

There were 18 outbreaks affecting predominantly mental health wards in the second wave



8.6 Outbreak Management Actions

- Daily management review by IPCT, with management timelines
- Enhanced cleaning of wards (cleaning records)
- Outbreak checklists including notifications and communications
- Twice weekly IPC led outbreak meetings (minuted) with ward staff, matrons, head of nursing, DIPC, estates/facilities

- Screening of all patients at time of outbreak identification with exposure
- Lateral flow testing for staff twice weekly. Positive cases confirmed via PCR.
- Restriction of staff movement, including flexible workers. This was identified as a challenge to the high number of staff required to fill shifts. Close liaison with staffing solutions when booking additional staff shifts, to try and provide continuity with staff placement.
- Additional training sessions for PPE champions for whole Trust, but specifically ensuring outbreaks wards had identified champions, who attended
- PPE champions are completing PPE assessments of staff competencies
- National online reporting to NHSE/I

8.7 Outbreak Learning

- Need to ensure clear communication and processes for planning ahead any bank shifts, to reduce staff movement
- Importance of early identification of staff contacts. In two outbreaks staff shared a house together but worked on different wards
- Importance of maintaining social distancing for patients
- Importance of staff social distancing within communal areas and providing adequate space for staff to have breaks
- Importance of ensuring adequate ventilation to improve air quality
- Unescorted leave should be suspended during an outbreak
- Importance of reinforcing clear messaging for PPE usage and support from PPE champions
- Regular outbreak meetings are supportive and helpful for staff, and provide clear oversight, support and actions which staff could work to

9. Antimicrobial Stewardship

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

The COVID-19 pandemic has presented numerous additional challenges for health professionals managing patients with infections. Continuing to raise awareness of the risks of antimicrobial resistance remains important to prevent serious infections – including COVID-19 as well optimising appropriate antibiotic use.

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

This includes:

- Continuing to focus on tackling antimicrobial resistance and promoting prudent use of antimicrobials during COVID-19 pandemic.
- Monitoring the overall antimicrobial consumption for the Trust and taking steps to tackle overuse.
- Quarterly audits and reports presented at the IPCDC. Overall, there is generally good compliance with prescribing antibiotics within guidelines. However, areas of improvement have been identified and further work is planned.
- Extending the antimicrobial audits to cover all services within the trust that use or prescribe antimicrobials.
- Supporting the implementation of relevant NICE / PHE antimicrobial guidelines.

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

10. Facilities

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

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

IPCT work closely with the facilities team, and the head of facilities attends the IPCDC providing service reports. The IPCT attend, support and participate in the annual PLACE (Patient Led Assessment of the Clinical Environment) assessments, however these have not taken place this year due to the pandemic.

11. Estates

The IPCT continue to advise and support estates with refurbishments and new builds within the Trust. This has required attendance at key design and planning meetings and the review of plans and minimum build standards. There have been few projects this year due to the pandemic.

12. Audits

12.1 Infection Prevention and Control Audits

There was a comprehensive and robust annual infection prevention and control audit programme for 2019/20, which consisted of infection prevention and control audits based on national standards. High levels of compliance have been maintained.

However due to the pandemic, the service areas have completed self-audits this year, which the IPCT have reviewed. Areas of poor or non-compliance are followed up with the service by the IPCT. The audits which were undertaken included all community hospitals, urgent care and inpatient mental health wards. All audits were completed during the audit year using adapted versions of the Infection Prevention Society (IPS) audit tools for monitoring infection prevention and control guidelines within the acute and community settings. Action plans were requested following each audit to address any identified areas and monitored.

Infection prevention and control (IPC) audits carried out during 2019-20 include:

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

Across the Trust the average results for inpatient wards was 95%. Facilities areas which fell below 85% have action plans in place.

Community team audits have not been able to be completed this year.

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

12.2 Hand Hygiene audits

Over the year and during peaks of high service and clinical demand, some audits were temporarily suspended. This included hand hygiene observational audits. However, these audits were restarted as soon as possible, and other monitoring was introduced at this time to ensure standards were being maintained. This included audits for PPE and weekly coordinator checklists. During 2019-20 the compliance average was 98%. Compliance with bare below the elbows was 99%.

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

Community hospitals with single rooms also conduct these practical assessments.

All audits are reviewed and monitored by the modern matrons and the IPCT. During 2020/21 the compliance average was 96%. Compliance with bare below the elbows was 98%. Any areas falling below the acceptable level are followed up by IPCT and action plans developed for improvement.

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

Hand hygiene practical assessments in community-based services based have been introduced on a risk assessment basis in:

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

However, these audits have been suspended for most of 2020/1 and will be restarted as soon as clinical capacity allows.

12.3 Personal Protective Equipment (PPE)

Audits were introduced this year to monitor and support clinical practice and the correct use and management of PPE. Wards complete weekly and results are evaluated and feedback to services by the relevant audit and governance teams. These are also monitored and discussed at the weekly Hospital Acquired Covid meeting led by the DIPC.

12.4 Matrons checklists

The matron's role within IPC has been reviewed and additional work undertaken to ensure this valued role is standardised in the organisation. Matrons are completing IPC checklist audits, which are monitored and reported via the directorate governance meetings, with any issues escalated to the IPCDC if necessary.

13. Decontamination

13.1 Decontamination arrangements

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

13.2 Audit of Decontamination

Audits of the decontamination of patient equipment are undertaken annually and are incorporated in the infection prevention and control audit programme. As discussed in Section 5.2 there have been issues with the Adenosine triphosphate (ATP) clean trace system, which has resulted in non-submission and entry of data. Any results obtained are reviewed and monitored by the IPCT monthly and quarterly reports produced and disseminated to the directorates.

During 2019-20 the average score for ATP testing was 87%

Due to the pandemic workload, there have been some omissions in the completion of medical devices and mattress checks. Decontamination records are centralised on the Trust shared computer drive allowing easy access for staff to review. These results are evaluated, and compliance reports developed for the services. Where improvement is required action plans are requested and compliance monitored. Mattress audits are also being completed monthly and the results kept centrally on the shared drive for easy review and access.

Medical devices decontamination records should be completed by 83 wards/areas. The average completion rates this year is 71%.

Mattress check records should be completed by 47 wards/areas. The average completion rate this year is: 54%. The collation of this data is now being undertaken by the Trust Clinical Audit team.

14. Training activities

Training sessions are provided for clinical staff. During the pandemic face to face classroom teaching has been replaced by online teams teaching sessions. The total percentage of staff trained in 2020/21 was 77% against a Trust target of 90%. This data is collated by the Learning and Development department and the training is delivered by the following methods, online virtual classroom via MS teams, workbooks and E-learning. All forms of training and their content are annually reviewed and updated to meet the learning outcomes of the current UK Core Skills Training Framework and training requirements of staff.

In addition to standard training, the IPCT provides:

- Bespoke training on request including specialist IV therapy training sessions and PPE application.
- The annual study days for the IPC link nurses were unable to be held
- Development of a new clinically based role to support the correct application and management of personal protective equipment (PPE) during the pandemic. This role was called a PPE safety champion and many IPC link nurses identified themselves as these champions.
- As this was a new role to the Trust a webinar was held with Gloucestershire Hospitals NHS Trust (GHT) DIPC and IPC lead to discuss and introduce the role. GHT had introduced this role and were able to provide feedback and insight into the efficacy, implementation and value of the role. It has been developed broadly across Oxford Health to include clinical and non-clinical staff in all directorate services
- Additional training has been provided by the IPCT, in the correct donning and doffing of PPE, including access to videos and training materials. PPE safety champion meetings are held to support the role.

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

15. Risks and future investments

There will continue to be ongoing support for the Adenosine Triphosphate (ATP) environmental testing system in older adult mental health wards and the community hospitals. This may be extended across the trust to all clinical areas and will therefore require further ongoing funding and investment.

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

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

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

IPC reporting and governance needs to be embedded with clear standardised reporting and monitoring processes within the directorates.

The COVID-19 pandemic has put extreme pressure on the IPCT. Further resources and additional IPC posts have been agreed by the Executive Team however so far recruitment is challenging. Currently the IPCT has recruited to a further Band 6/7 development post, who commenced in post in January 2021 and a senior experienced IPC lead role (Band 8a) has been recruited to most recently (starting August 2021). This will take the IPCT from 2.6wte to 4.6wte.

16. Conclusion

This has been an exceptional year for IPC. The IPCT have led the Trust response to a global COVID-19 pandemic as well as maintaining the required ongoing core IPC programme to reduce healthcare associated infections. The team are commended for their leadership and management of our Trust response, working in partnership with the Chief Nurse as DIPC.

Work has still continued regarding the monitoring and investigation of mandatory reportable infections including *Clostridium Difficile*. There remains a challenge in achieving further reduction in cases and it is likely the Trust has reached the irreducible level. This has been demonstrated by the review process undertaken in the health economy review meetings.

The emergence of resistant organisms and antimicrobial resistance remain a real challenge in modern healthcare. The focus remains on infection prevention and control, developing and improving patient care pathways across the health economy, reviewing and improving clinical practice and robust reviews and scrutiny of each case of infection to identify learning and ensure the continued high standard of care. The reduction of gram-negative bacteraemia infections remains a challenge. The vast majority of cases develop in the community rather than inpatient services and therefore further work nationally and locally is ongoing to understand the root cause and appropriate strategies to try and reduce the incidence.

The COVID-19 pandemic has placed enormous strain on IPC resources. However, the IPCT have met the challenge well and collaborative working, with directorate colleagues, has ensured IPC practices are supported and maintained across all clinical services. The depth and breadth of this working can be seen within the IPC BAF.

However, it is noted that this pandemic highlighted that urgent additional resources and staff are required to ensure support going forward and recovery. This is now in the plan going forward.

Appendix 1

IPCDC terms of reference



Oxford Health
IPCDC ToR April 202

Appendix 2

Board Assurance Framework



IPC BAF updated
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