University Hospitals of North Midlands NHS Trust

Infection Prevention, Vaccination and Sepsis Team

Annual Report 2020/21

Together Compassion Safe Improving

Infection Prevention SAVES LIVES
Does your patient need their Cannula?
CATHETER
DON'T HANG ABOUT TAKE IT OUT
CANNULA
Does your patient need their Catheter?

Infection Prevention, Flu & Sepsis Team

PROUD TO CARE

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Foreword by Chief Nurse/Director of Infection Prevention and Control (DIPC)

Infection Prevention and Control Annual Report 2020-21

This Annual report covers the period 1st April 2020 to 31st March 2021 and has been written in line with the ten criteria as outlined in the Health and Social Care Act 2008 Code of Practice in the Prevention and Control of Infection (updated 2015). The ten criteria outlined in the code are used by the Care Quality Commission to judge a registered provider on how it complies with Cleanliness and Infection Prevention & Control requirements detailed in the legislation.

The 2020/21 proved to be another busy and challenging year for the Infection Prevention, Flu & Sepsis Team. In response to the COVID 19 pandemic UHNM established an incident Control Centre and Major Incident Groups, changing practice when evidence became available and following National guidance. A great effort has been directed towards the staff COVID19 vaccination programme.

MRSA bacteraemia, Clostridium *difficile,* sepsis and antimicrobial stewardship remain a high priority for the Trust, alongside the gathering of information from: Root Cause Analysis, Post Infection Reviews, audits and listening to front line staff which has helped in developing action plans and programmes of work to target areas in order to make a difference by improving patient safety/outcomes.

Healthcare associated infections remains high on the media and political agenda, being seen as a visible and unambiguous indicator of quality and safety of patient care. The infection prevention agenda faces many challenges including the ever increasing threat from Pandemic outbreaks, antimicrobial resistant micro-organisms, growing service development, national guidelines and targets/outcomes. UHNM work closely with the Health Economy colleagues.

The Infection Prevention, Flu & Sepsis Team (IPT) structure is now embedded within our organisation, focusing on prevention and supporting our front-line colleagues to optimise the safety of our patients.

The IPT do not work in isolation; the successes over the last year are due to the commitment to infection prevention that is demonstrated at all levels within the organisation. It is crucial that this commitment continues to ensure that high standards are maintained. The emphasis continues to be on sustaining and improving outcomes for 2021-2022.

Sadly this will be my last year as chief Nurse/DIPC at UHNM. I would like to thank everyone for the part they have played and your response to the COVID -19 Pandemic and other infections.

Michelle Rhodes, Chief Nurse /Director of Infection Prevention

Key Achievements of 2020-21

- IP team has worked hard during such an unprecedented 12 months, showing how flexible and resilient a team we have, all the team IP, sepsis and vaccination. Working closely with all departments under constant changing guidance and lack of PPE to respond to the global pandemic emergency.

- Delivery of extensive FFP3 train the tester sessions, to ensure cascade fit testers were available throughout the Trust.

- Review and advice on various types of PPE, FFP3 masks and reusable respirators.

- Planning and delivery of influenza and COVID 19 vaccinations.

- Delivered sepsis CPD that included workshops & simulation for all level of clinical & medical staff, an initiative to enhance sepsis compliance and promote patients safety.

- Continued sepsis awareness, increased focus of education in Emergency portals & covid-19 ward areas, face to face with social distancing, Microsoft Teams, kiosks, ward visit reinforcement, creating new sepsis cards for campaign and audits throughout the pandemic.

- Working in collaboration with the Maternity Team to approve introduction of electronic sepsis screening on K2 Athena, as well as updating Adult UHNM sepsis pathway in conjunction with UK Sepsis Trust guidance.

- Working additionally out of hours to facilitate and give opportunity to regular night staff to attend sepsis training sessions.

- Supported laboratory staff with resources/roll-out of information to support Trust change to Biomerieux blood culture bottles.

- Collaborative working with IM&T department and Microbiology to create Trust wide iPortal/Medway Covid-19 contact alert.

- Collaborative working with Tissue Viability Team and IP support with the BARD urinary catheter tray roll-out at RSUH.

- 9,197 influenza vaccines were given which is 9.8% up year on year versus 2019/20.

- Strengthening of the theory and practice of Aseptic Non Touch Technique (ANTT) took place.

- A collaborative work ethos with commissioners and external colleagues in relation to MRSA bacteraemia

Abbreviations

AMR	Anti-Microbial Resistance
ASG	Antimicrobial Stewardship Group
CCG	Clinical commissioning groups
C *difficile*	Clostridium *difficile*
CDI	Clostridium *difficile* infection
CQC	Care Quality Commission
CQUIN	Commissioning for Quality and Innovation Payment Framework
DH	Department of Health
DIPC	Director of Infection Prevention & Control
E coli	Escherichia coli
ESR	Electronic Staff Record
ESBL	Extended Spectrum Beta Lactamase
FFP3	Filter Face Piece (with an assigned protection of 20)
GDH Ag	Glutamate dehydrogenase antigen of *C. difficile*
GRE	Glycopeptide Resistant Enterococcus
HCAI	Health Care Associated Infection
ICD	Infection Control Doctor
IM&T	Information & Technology
IP	Infection Prevention
IPCC	Infection Prevention and Control Committee
IPN	Infection Prevention Nurse
IPT	Infection Prevention Team
IV	Intravenous
MDT	Multi-Disciplinary Team
MGNB	Multi resistant Gram negative bacilli
MHRA	Medicines and Healthcare Products Regulatory Agency
MRSA	Meticillin Resistant *staphylococcus aureus*
MSSA	Meticillin Susceptible *staphylococcus aureus*
OPAT	Outpatient Parenteral Antibiotic Therapy
PCR	Polymerase Chain Reaction
PFI	Private Fund Initiative
PHE	Public Health England
PLACE	Patient-led assessments of the Care environment
PPE	Personal Protective Equipment
RAG	Red, amber, green
RCA	Root Cause Analysis
RSUH	Royal Stoke University Hospital
SSI	Surgical Site Infection
TEC	Trust Executive Committee
UHNM	University Hospitals of North Midlands
VNTR	Variable-number tandem-repeat
VCTM	UHNM on line learning

Introduction

This report summarises the combined activities of the Infection Prevention, Vaccination & Sepsis Team (IPT) and other staff at University Hospitals of North Midlands (UHNM) in relation to the prevention and control of healthcare associated infections (HCAIs).

The Trust recognises that the effective prevention and control of HCAIs is essential to ensure that patients using our services receive safe and effective care. Effective prevention and control must be an integral part of everyday practice and applied consistently to ensure the safety of our patients. In addition, good management and organisational processes are crucial to ensure high standards of infection prevention and control measures are maintained.

This report demonstrates how the Trust has systems in place, for compliance with the Health and Social Care Act 2008: Code of Practice for the NHS on the prevention and control of healthcare associated infections and related guidance.

The Trust set out to continue the commitment to improve performance in infection prevention practice. As outlined in the Health and Social Care Act 2008, at the heart of this law there are two principles:

- to deliver continuous improvements of care
- it meets the need of the patient

With this in mind, patient safety remains the number one priority for the Trust. Infection prevention is one of the key elements to ensure UHNM has a safe environment and practices which is reflected in the Trust '2025 Vision' and 3 year objectives and milestones – turning the vision into a reality.

Compliance Criteria 1:

Systems to manage and monitor the prevention and control of infection. These systems use risk assessments and consider how susceptible service users are and any risks that their environment and other users may pose to them

Infection Prevention Team

At UHNM the DIPC is the Chief Nurse and has overall responsibility for the IPT. The Associate Chief Nurse (Infection Prevention) at UHNM also has the role of Deputy DIPC.

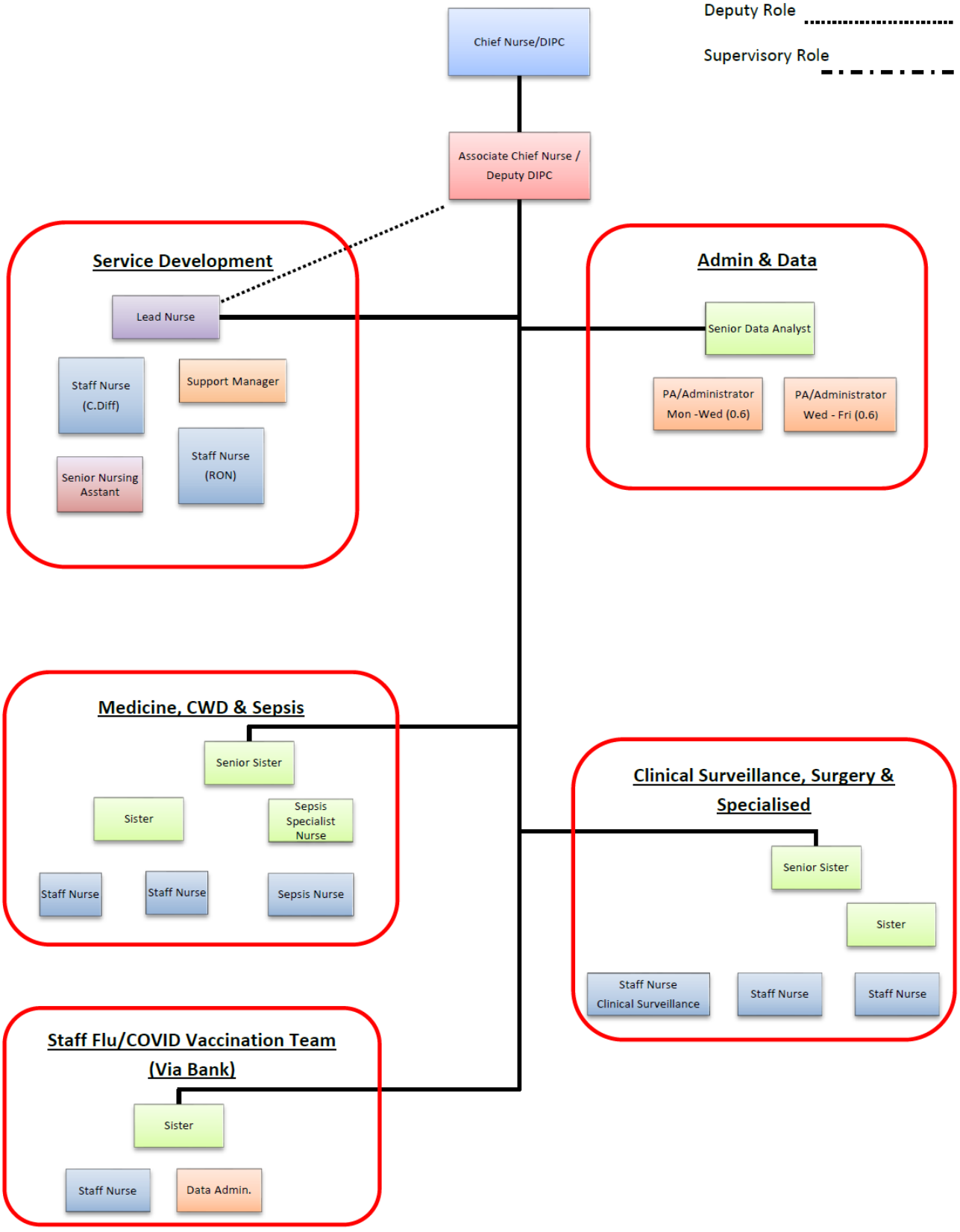
The IPT work collaboratively alongside front-line Clinical Leaders, supporting proactivity with improved clarity and defined alignment to clinical services. The introduction of new technologies allows the IPT to be present within the clinical settings for the majority of their time.

Quality Nurses remain an integral part of service delivery at UHNM. Nurses have a significant role in patient safety explicit within their responsibilities. This provides a key lynch-pin, and an ideal opportunity for the IPT to meet the challenges and significantly change the method of service delivery to front-line colleagues.

The infection prevention service is provided through a structured annual programme of works which includes expert advice, education, audit, policy development and review and service development. The Trust has 24 hour access to expert advice and support.

Infection Prevention & Sepsis Structure – 2021 V2

University Hospitals of North Midlands NHS Trust



Committee Structures and Assurance Processes

Trust Board

The Code of Practice requires that the Trust Board has a collective agreement recognising its responsibilities for infection prevention and control. The Chief Executive has overall responsibility for the control of infection at UHNM. The Chief Nurse is the Trust designated Director of Infection Prevention and Control (DIPC). The DIPC attends Trust Board meetings with detailed updates on infection prevention and control matters. The DIPC also meets regularly with the Chief Executive.

Quality Governance Committee (CQC)

The Quality Governance Committee is a non-executive committee of the Trust Board.
The purpose of the Committee is to assure the Trust Board of the organisation's performance against quality and research objectives. This assurance is secured through the Assurance Framework, the Corporate Risk Register and the audit plans, which focus on the quality and research objectives of the Trust.
The Infection Prevention Team provides a quarterly report on surveillance and outbreaks. The Infection Prevention Board Assurance framework is also submitted to the committee quarterly.

Executive Quality and Safety Oversight Group

The Executive Quality and Safety Oversight Group has been formed as an Executive Group to support assurance through the Quality Governance Committee to the Trust Board on quality and safety.

The Executive Quality and Safety Oversight Group serves a dual purpose within the Trust's governance, assurance and performance arrangements:

- Accountable to the Quality Governance Committee, through its executive membership it will provide assurance across the key areas set out within the Board Assurance Framework
- It will receive and consider any concerns or issues escalated from Divisions and sub-groups and provide advice, guidance and support

The Quality and Safety Oversight Group is the forum at which the Trust focuses on its delivery of patient centred care and services in accordance with the Trust's Strategic Objectives. The Group is responsible for developing, implementing, monitoring and evidencing actions which improve the quality and safety of care and services provided to patients and service users.

The Infection Prevention Team provides a monthly report on surveillance and outbreaks.

Divisional Infection Prevention Groups

These groups are responsible for monitoring local performance in relation to infection prevention. Assurance is provided by Divisional IP groups, and Infection Prevention meetings. Groups provide assurance to the Trust IPCC that adequate systems and processes are in place within wards and departments and that performance and risks are being monitored.

Antimicrobial Stewardship Group

The Antimicrobial Stewardship Group (ASG) is a multidisciplinary group responsible for the monitoring and review of good antimicrobial stewardship within the Trust. The ASG reports directly to the IPCC and meets on a bi-monthly basis. The group drives forward local activities to support the implementation of international and national initiatives on antimicrobial stewardship including Start Smart then Focus and the European Antibiotic Awareness Campaign. The ASG produces and updates local antimicrobial guidelines which takes into account local antibiotic resistance patterns; regular auditing of the guidelines; antimicrobial stewardship practice and quality assurance measures; and identifying actions to address poor compliance with guidelines. Antimicrobial audit results are reported widely throughout the organisation, for example at Divisional Clinical Governance and Speciality Morbidity and Mortality meetings. There is an escalation process for clinical areas that do not follow clinical guidelines and there is active engagement at Executive level with Senior Clinicians in specialities with repeated non-compliance.

There is a separate **Health Economy Antimicrobial Group** chaired by one of the Consultant Microbiologists. The group meets quarterly, and has representation from all key stakeholders, including General Practitioners. A regular report is submitted to IPCC.

Decontamination Meetings

The Trust Decontamination Lead is the Chief Executive. The management of Decontamination and compliance falls into three distinct areas: Estates, IPT and the Equipment User, details are outlined later in the report.

Water Safety Group

The Water Safety group is a sub group of IPCC and meets quarterly. It is chaired by the Deputy DIPC with multi-disciplinary representation.

Mortality Review Group

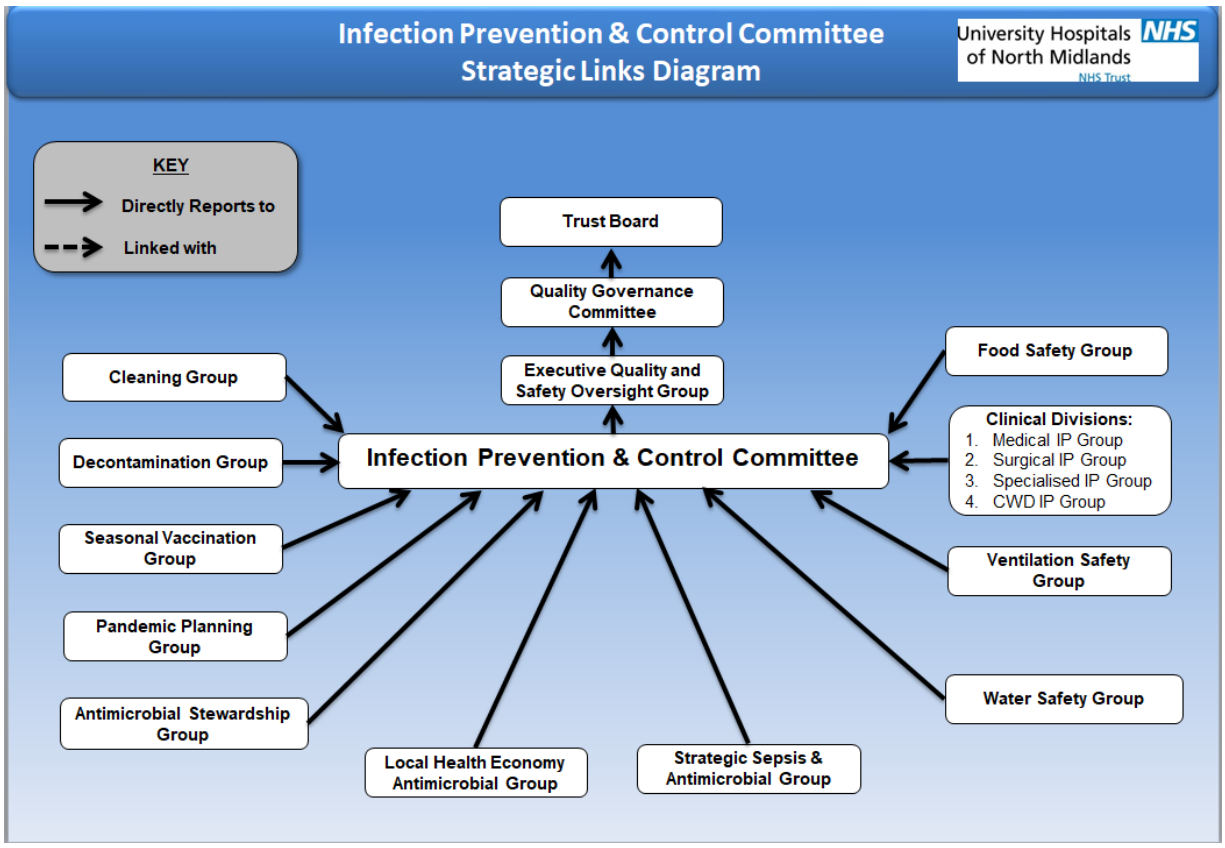
The Trust Mortality Review Group meets monthly the Chair for the group is the Deputy Medical Director (Patient Safety). This group reports directly to the Executive Quality and Safety Oversight Group providing an understanding of the interpretation and application from mortality data. The group has initiated a proactive approach to reviewing mortality alerts and providing prompt assurances to both the Trust and its external stakeholders in relation to any potential alerts relating to mortality. The mortality information and analysis is also reported to the Quality Governance Committee to allow for non-executive review and challenge around the robustness of the data and the processes in place for reviewing mortality and providing assurances to the Trust Board.

The corporate structure for reporting and monitoring on mortality issues is outlined below:

Clostridium *difficile* 30 day all-cause mortality information is included in the Infection prevention reports to IPCC

The IPT completed a gap analysis of evidence required to comply with the Health and Social Care Act 2008, Code of Practice on the prevention and control of infection and related guidance (updated 2015). This was reported to IPCC.

Infection Prevention and Control Committee (IPCC) Strategic Links



Reports/Papers Received by IPCC

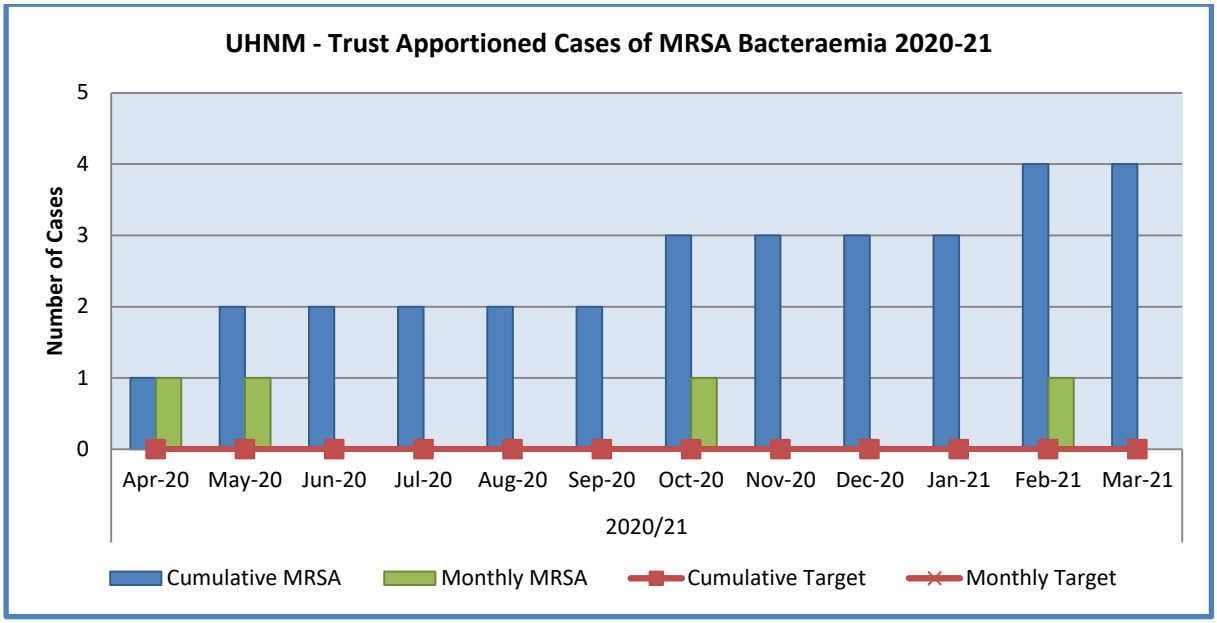
Policy/Procedure Updates and Standard Operating Procedures (SOP) updates	Rotational Report: Water Safety
UHNM HCAI Surveillance & Performance Reports	Rotational Report: Occupational Health
Outbreaks & Incidents	Rotational Report: Decontamination
Divisional Reports	Rotational ventilation
Environment Report	Pandemic Flu Update
UHNM Antimicrobial Group Update	Annual Report
Antimicrobial CQUIN Update	Sepsis Report
Local Health Economy Antimicrobial Group Update	Annual Manual Decontamination Audit
Documents Received from other Committees, Regional & National	Annual Mattress Audit Report
HCAI Monthly Bulletin	Annual IP Link Practitioner Report
Compliance report for IPCC (Governance)	IP Risk Register
Review & Update Committee Terms of Reference	IP Stat & Mandatory figures (Quarterly)

IP Board Assurance Framework (BAF)	Food Safety Group Update
SSI Report	Antimicrobial Stewardship Group Minutes
Blood Culture Contamination Rates Report	Decontamination Group Minutes
BSI Report /Gram negative Report	IP Risk Register
Hand Hygiene Audits	Water Safety Group Minutes
ANTT Update	Sharps Report
CDI Plan Update	Health Economy Committee
PHE Update	3T Heater Cooler Update
Annual IP Code of Practice Self -Assessment Tool	

Groups/Meetings Infection Prevention Team Attend

COVID 19 Tactical Meeting	COVID 19 Clinical Meeting
COVID 19 Gold Meeting	COVID 19 vaccine meetings
Weekly IP Systems Meeting	Staffordshire and Stoke on Trent Test and Trace Outbreak Management Tactical Group
Antimicrobial Stewardship Group	Health Economy Antimicrobial Group
Clinical Equipment Product Evaluation Group (CEPEG)	Executive Quality and Safety Oversight Group
Quality Governance Committee	Health Economy IP Group
Seasonal vaccination Group	Infection Prevention Divisional Group
Clostridium *difficile* Multi- Disciplinary Meetings	Infection Prevention Group Meeting , Estates, Facilities and PFI Division
Winter Planning Group	Mortality Review Group
Clostridium period of increased incidence meetings (PII)	Pneumatic Tube Meetings
Bed and Mattress Meetings	Decontamination Group
Estates refurbishments and new development projects	Ventilation Group
Vitals Reporting Focus Group	Strategic Sepsis and antimicrobial Group
Trust Health and Safety Committee	Tissue Viability
Health and Safety Imaging	Teaching and Educational Meetings
Fire Enforcement	Water Safety Group

MRSA Bacteraemia (Blood stream infection)



Note:

- **Patient 1** Meeting held with internal and external stakeholders. Premature baby transferred from neighbouring Trust to NICU. MRSA status of mother unknown. MRSA typing is a community strain. Decision was unavoidable, no lapses in care identified during patient journey. Baby transferred back to original Trust, and subsequently discharged.
- **Patient 2** Meeting held with internal and external stakeholders. Covid-19 patient on Critical Care Unit. Known to have MRSA in sputum and many pre-existing medical conditions. Decision was unavoidable, no lapses in care identified during patient journey. Patient discharged.
- **Patient 3** Meeting held with CCG. Known MRSA colonization since 2014. Inpatient at RSUH and Haywood Hospital since May 2020. Transfer back to RSUH June 2020. Multiple pre-existing conditions. Decision was unavoidable, no lapses in care identified during patient journey. Patient discharged to Care Home.
- **Patient 4** Meeting held with CCG. Admitted for emergency surgery. No previous admissions and no known MRSA history. Some pre-existing medical conditions. Decision was unavoidable, no lapses in care identified during patient journey. Patient discharged home.

***Clostridium difficile* Infection (CDI)**

Clostridium *difficile* is a bacterium that can cause colitis. Symptoms range from mild diarrhoea to a life threatening disease. Infections are often associated with healthcare, particularly the use of antibiotics which can upset the bacterial balance in the bowel that normally protect against CDI. Infection may be acquired in the community or hospital, but symptomatic patients in hospital may be a source of infection to others. A proportion of the healthy population have Clostridium *difficile* normally residing in their gut without causing any illness.

In March 2012 the Department of Health (DH) issued revised guidance on how to test, report and manage CDI. The new guidance aimed to provide more effective and consistent diagnosis, testing and treatment of CDI. It provided the ability to categorise patients into one of three groups:

- CDI likely
- Potential Clostridium *difficile* excretors (carriers)
- CDI unlikely

Identification of potential Clostridium *difficile* excretors may aid infection control measures. UHNM is compliant with DH testing guidance for CDI.

All patients with a toxin A/B positive or a toxin B gene PCR test positive report are isolated until at least 72hrs free of symptoms and a formed stool has been achieved.

Reporting of Clostridium *difficile* toxin cases Public Health England (PHE)

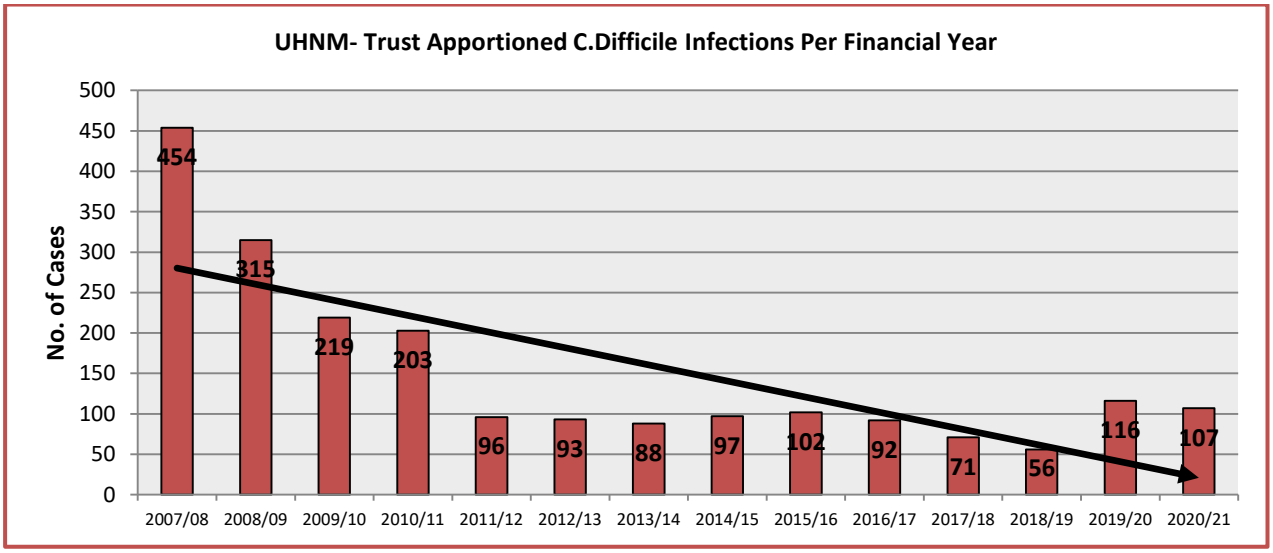
Healthcare associated cases (HAI) Cases are Clostridium *difficile* toxin positive specimens taken on or after day 3 of a hospital admitted spell where day 1 is the day of admission.

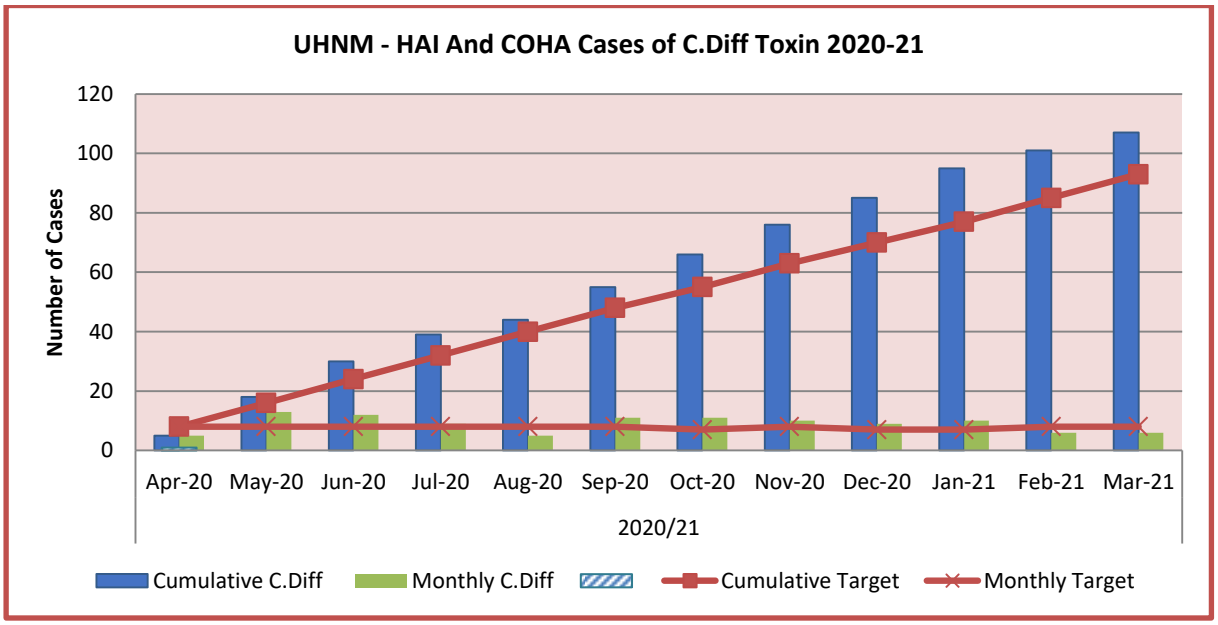
Community onset hospital associated (COHA) cases that occur in the community (or within two days of admission) when the patient had been an in-patient in the trust reporting the case in the previous four weeks.

From April 2019 onwards the performance of each Trust in relation to their annual target (as set out by NHSi in their CDI Objectives for NHS organisations) regarding trust apportioned cases is the total of **HAI** cases plus **COHA** cases.

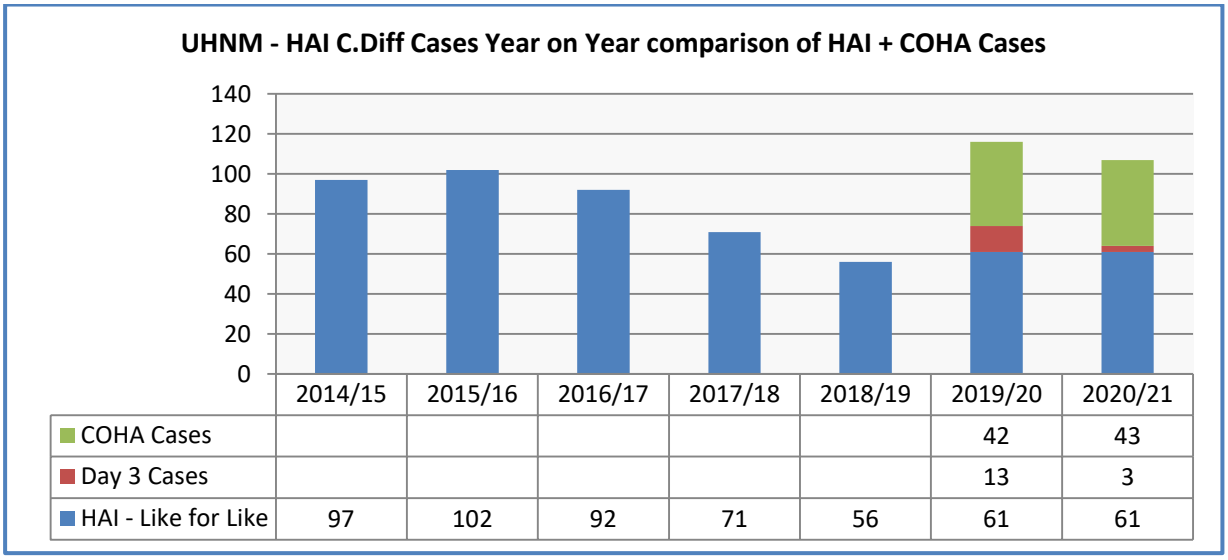
The target set by NHS England for Trust acquired cases at UHNM 2020-21 was 93. UHNM reported a total of 107 cases which is an 8% decrease on the previous year 2019/20 (when 116 Trust apportioned cases were reported), and well above the target.

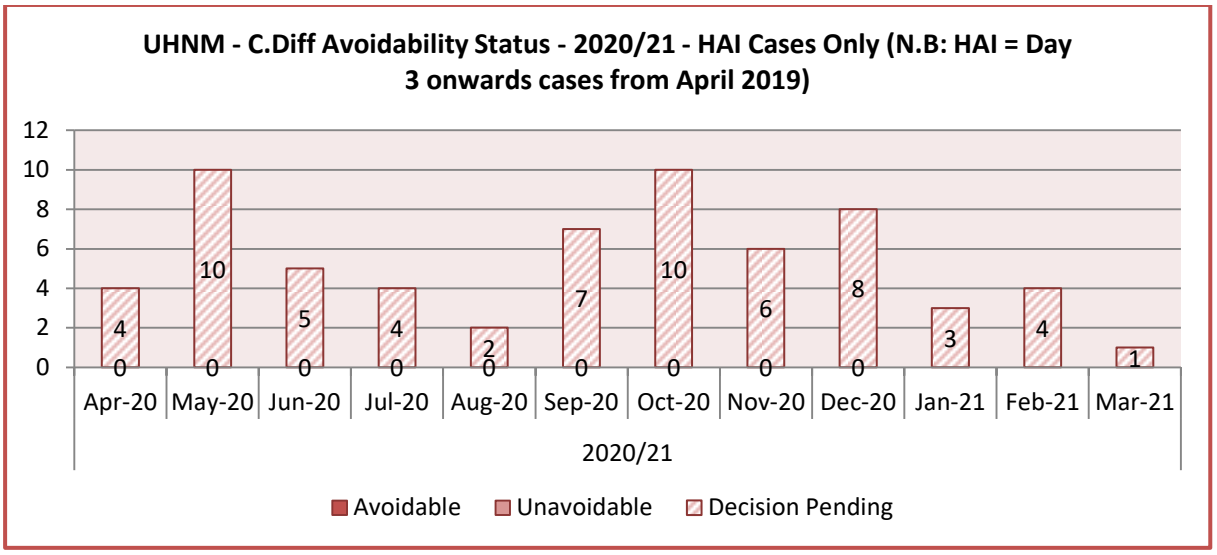
In relation to avoidability (lapses in care).This process was paused due to the COVID 19 pandemic, which was discussed and agreed with the CCG. The avoidably panel will re-commence in April 2021.

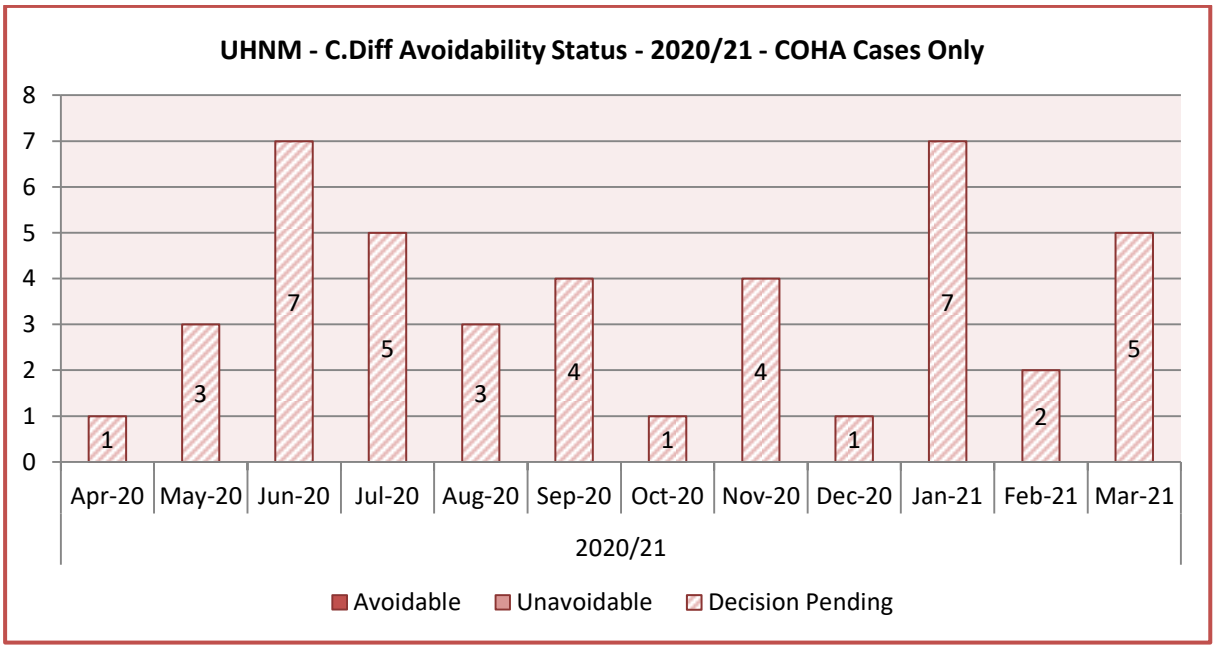


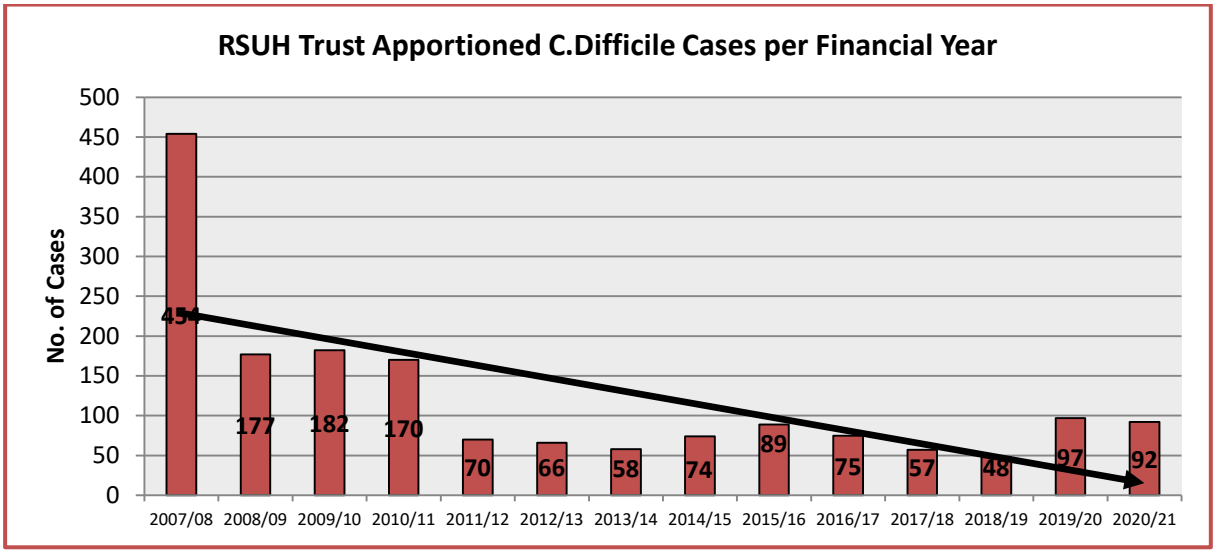


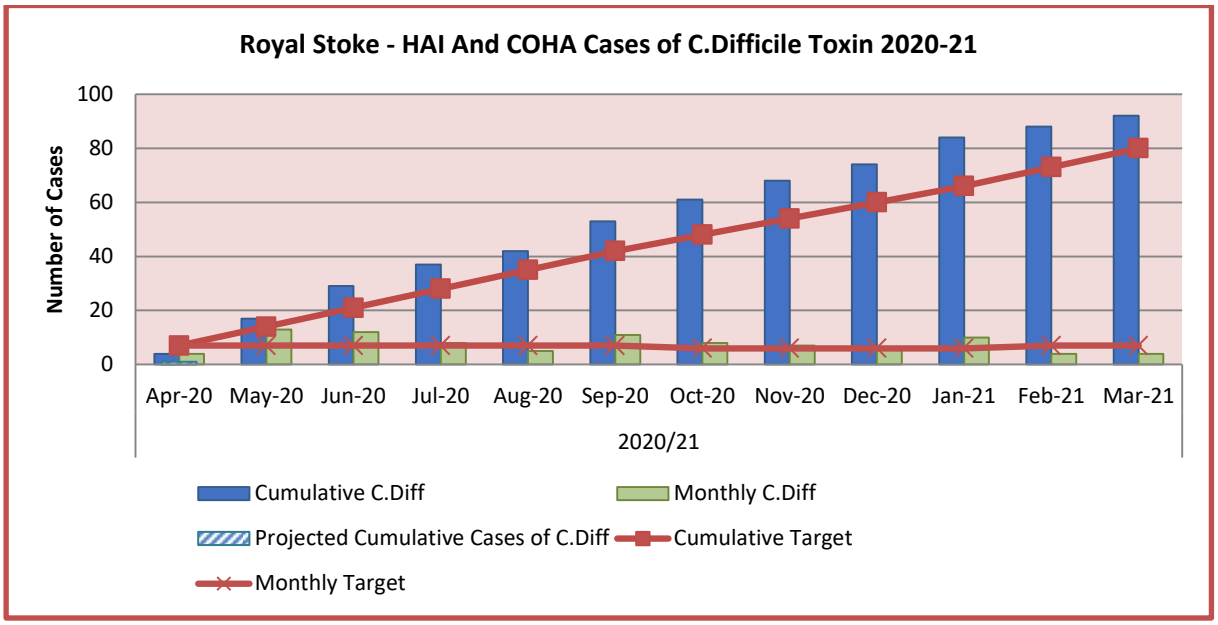
The following chart shows the impact that the change in Trust apportionment rules have had on the total number of cases attributed to UHNM in 2019/20. Using the previous apportionment rules of specimens taken on or after day 4 of an admission spell, where day 1 is the day of admission, UHNM would have reported 61 HAI cases in both year 1 (2019/20) and year 2 (2020/21) under the new apportionment rules. The effects of the new definition of using specimens taken on day 3 onwards, plus specimens taken on day 1 or day 2 of a re-admission within 28 days are clearly shown in the following chart as accounting for an extra 13 cases in year 1 (2019/20) and an extra 3 cases in year 2 (2020/21) where the specimen was taken on day 3 and 42 cases in year 1 (2019/20) and 43 cases in year 2 (2020/21), where the specimen was taken within 28 days of a previous discharge (COHA cases).

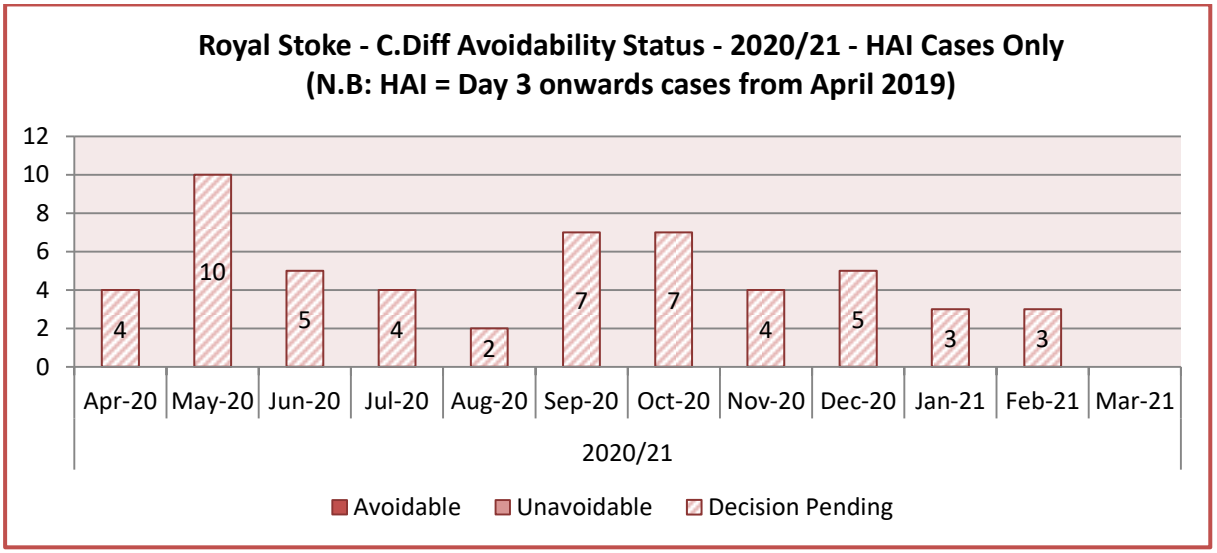

UHNM - HAI C.Diff Cases Year on Year comparison of HAI + COHA Cases
140
120
100
80
60
40
20
0
2014/15 2015/16 2016/17 2017/18 2018/19 2019/20 2020/21
COHA Cases 42 43
Day 3 Cases 13 3
HAI - Like for Like 97 102 92 71 56 61 61

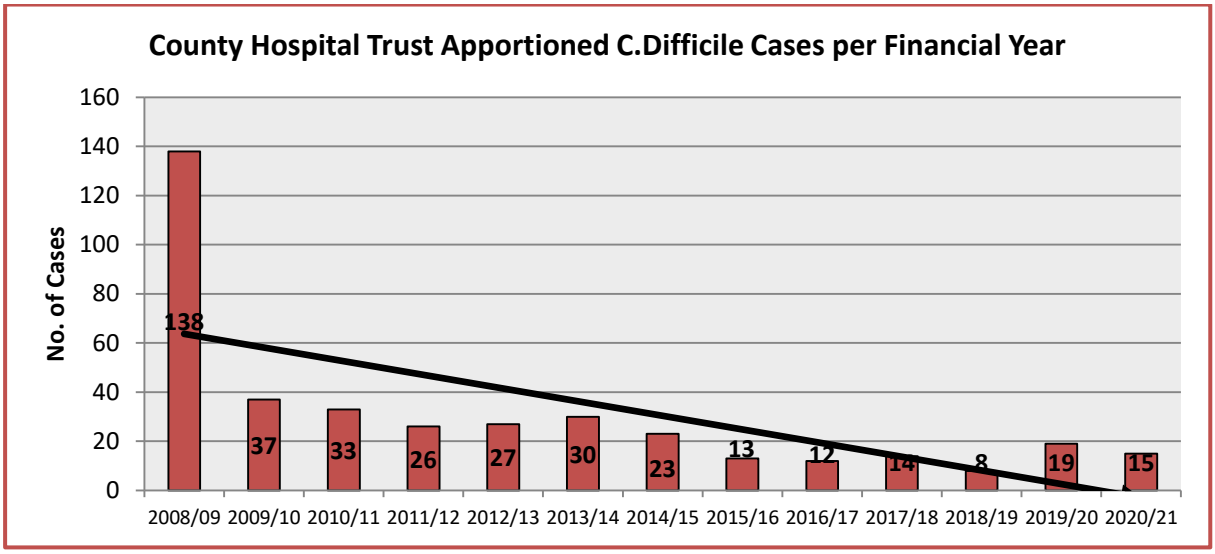

UHNM - C.Diff Avoidability Status - 2020/21 - HAI Cases Only (N.B: HAI = Day 3 onwards cases from April 2019)
12
10
8
6
4
2
0
4 10 5 4 2 7 10 6 8 3 4 1
0 0 0 0 0 0 0 0 0
Apr-20 May-20 Jun-20 Jul-20 Aug-20 Sep-20 Oct-20 Nov-20 Dec-20 Jan-21 Feb-21 Mar-21
2020/21
Avoidable
Unavoidable
Decision Pending

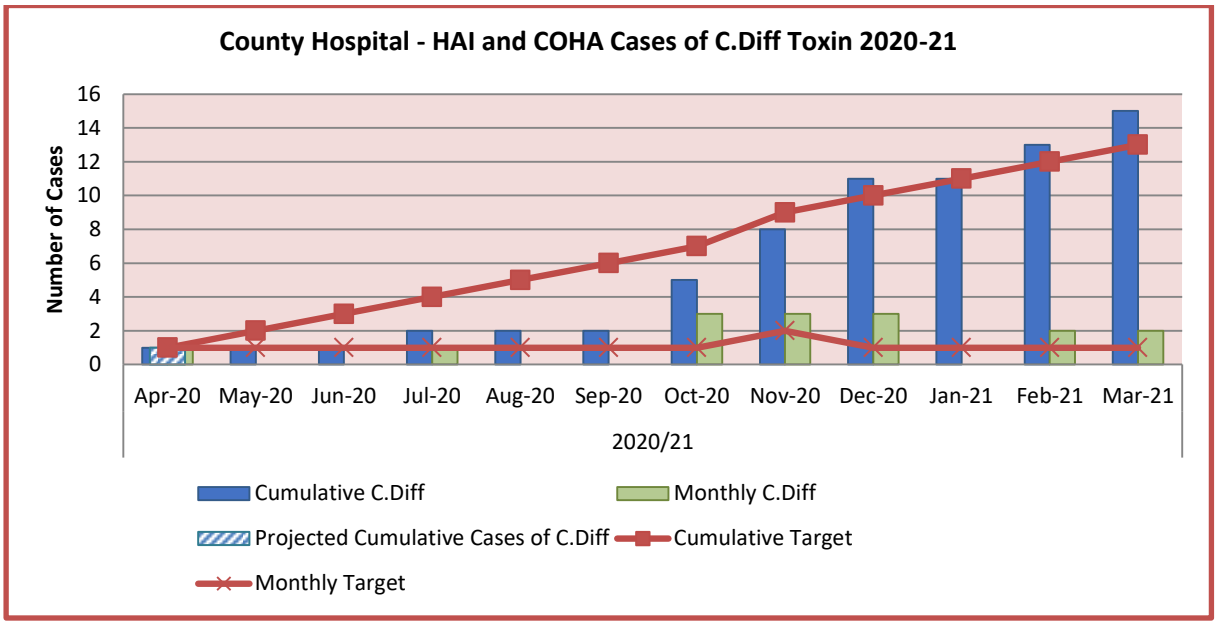

UHNM - C.Diff Avoidability Status - 2020/21 - COHA Cases Only
8
7
6
5
4
3
2
1
0
1 3 7 5 3 4 1 4 1 7 2 5
Apr-20 May-20 Jun-20 Jul-20 Aug-20 Sep-20 Oct-20 Nov-20 Dec-20 Jan-21 Feb-21 Mar-21
2020/21
Avoidable
Unavoidable
Decision Pending

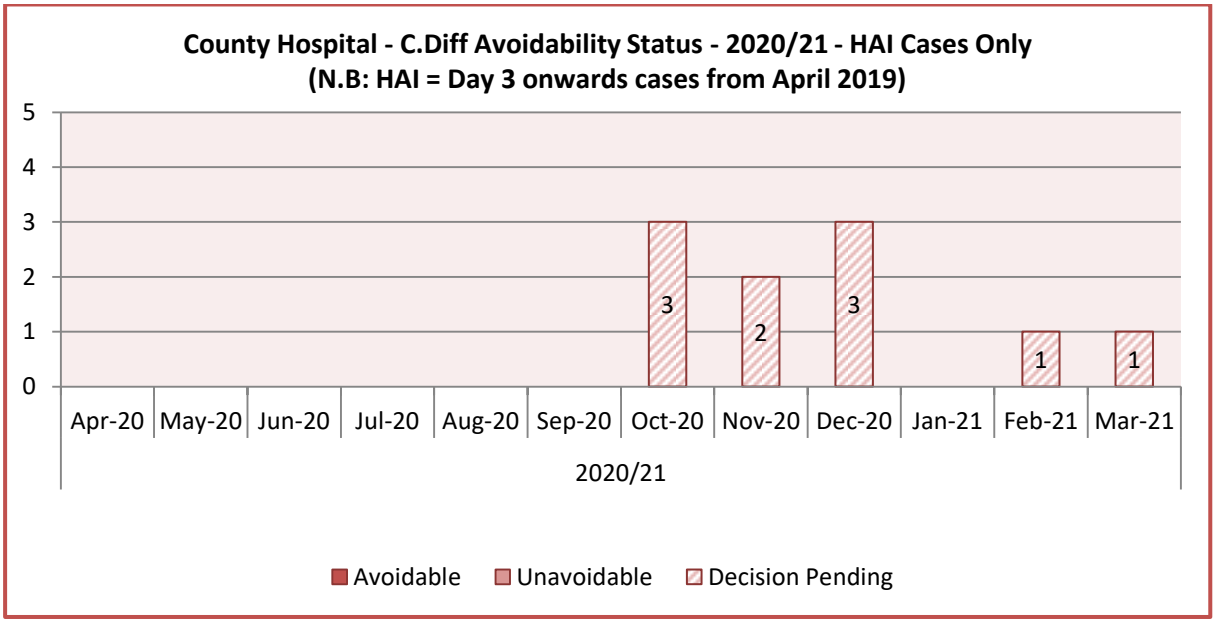

RSUH Trust Apportioned C.Difficile Cases per Financial Year
No. of Cases
500
450
400
350
300
250
200
150
100
50
0
454
177
182
170
70
66
58
74
89
75
57
48
97
92
2007/08
2008/09
2009/10
2010/11
2011/12
2012/13
2013/14
2014/15
2015/16
2016/17
2017/18
2018/19
2019/20
2020/21

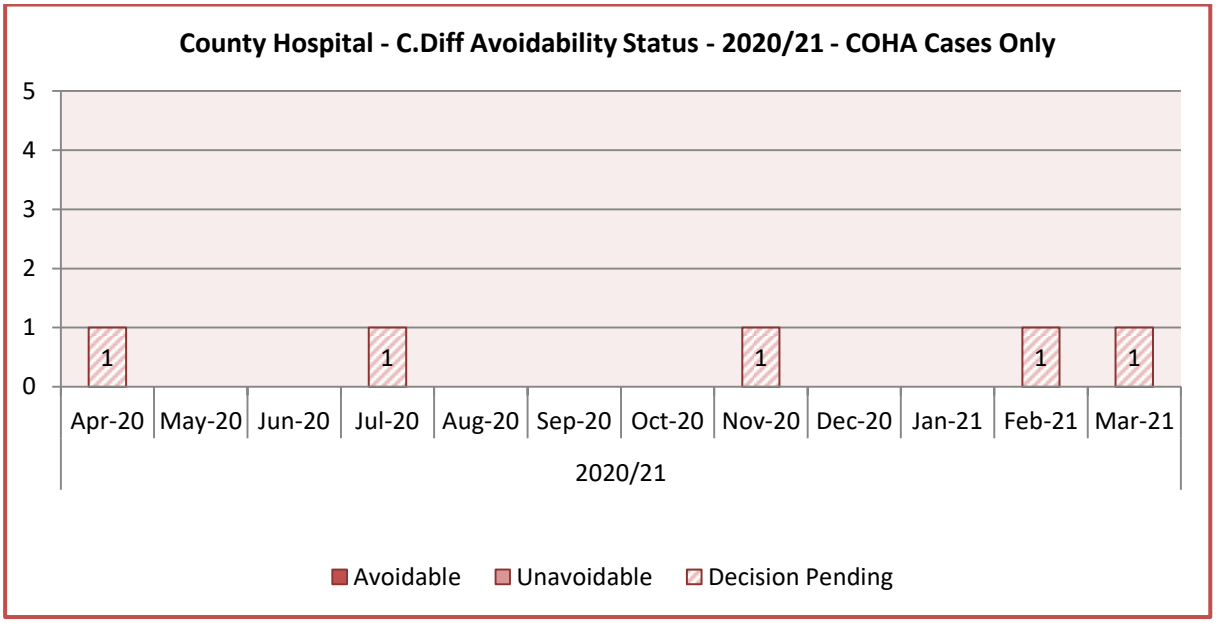

Royal Stoke - HAI And COHA Cases of C.Difficile Toxin 2020-21
Number of Cases
100
80
60
40
20
0
Apr-20
May-20
Jun-20
Jul-20
Aug-20
Sep-20
Oct-20
Nov-20
Dec-20
Jan-21
Feb-21
Mar-21
2020/21
Cumulative C.Diff
Monthly C.Diff
Projected Cumulative Cases of C.Diff
Cumulative Target
Monthly Target


Royal Stoke - C.Diff Avoidability Status - 2020/21 - HAI Cases Only
(N.B: HAI = Day 3 onwards cases from April 2019)
12
10
8
6
4
2
0
4
10
5
4
2
7
7
4
5
3
3
Apr-20
May-20
Jun-20
Jul-20
Aug-20
Sep-20
Oct-20
Nov-20
Dec-20
Jan-21
Feb-21
Mar-21
2020/21
Avoidable
Unavoidable
Decision Pending


County Hospital Trust Apportioned C.Difficile Cases per Financial Year
No. of Cases
160
140
120
100
80
60
40
20
0
138
37
33
26
27
30
23
13
12
14
8
19
15
2008/09 2009/10 2010/11 2011/12 2012/13 2013/14 2014/15 2015/16 2016/17 2017/18 2018/19 2019/20 2020/21


County Hospital - HAI and COHA Cases of C.Diff Toxin 2020-21
Number of Cases
16
14
12
10
8
6
4
2
0
Apr-20 May-20 Jun-20 Jul-20 Aug-20 Sep-20 Oct-20 Nov-20 Dec-20 Jan-21 Feb-21 Mar-21
2020/21
Cumulative C.Diff
Monthly C.Diff
Projected Cumulative Cases of C.Diff
Cumulative Target
Monthly Target


County Hospital - C.Diff Avoidability Status - 2020/21 - HAI Cases Only
(N.B: HAI = Day 3 onwards cases from April 2019)
5
4
3
2
1
0
3
2
3
1
1
Apr-20 May-20 Jun-20 Jul-20 Aug-20 Sep-20 Oct-20 Nov-20 Dec-20 Jan-21 Feb-21 Mar-21
2020/21
Avoidable
Unavoidable
Decision Pending



Decisions on avoidability was paused due to COVID 19 pandemic. The avoidability panel will recommence in April 2021.

Clostridium *difficile* Action Plan

Preventing and controlling the spread of Clostridium *difficile* is a vital part of the Trust's quality and safety agenda by a multifaceted approach and the proactive element of early recognition and isolation of Clostridium *difficile* toxin positive cases and of those cases that are Clostridium *difficile* carriers (PCR positive).

A Clostridium *difficile* Task and Finish Group was formed to initially focus on West Building, the group meets monthly.

All hospital acquired Clostridium *difficile* positive samples or cases where the patient has had a recent hospital stay at UHNM are submitted for ribotyping.

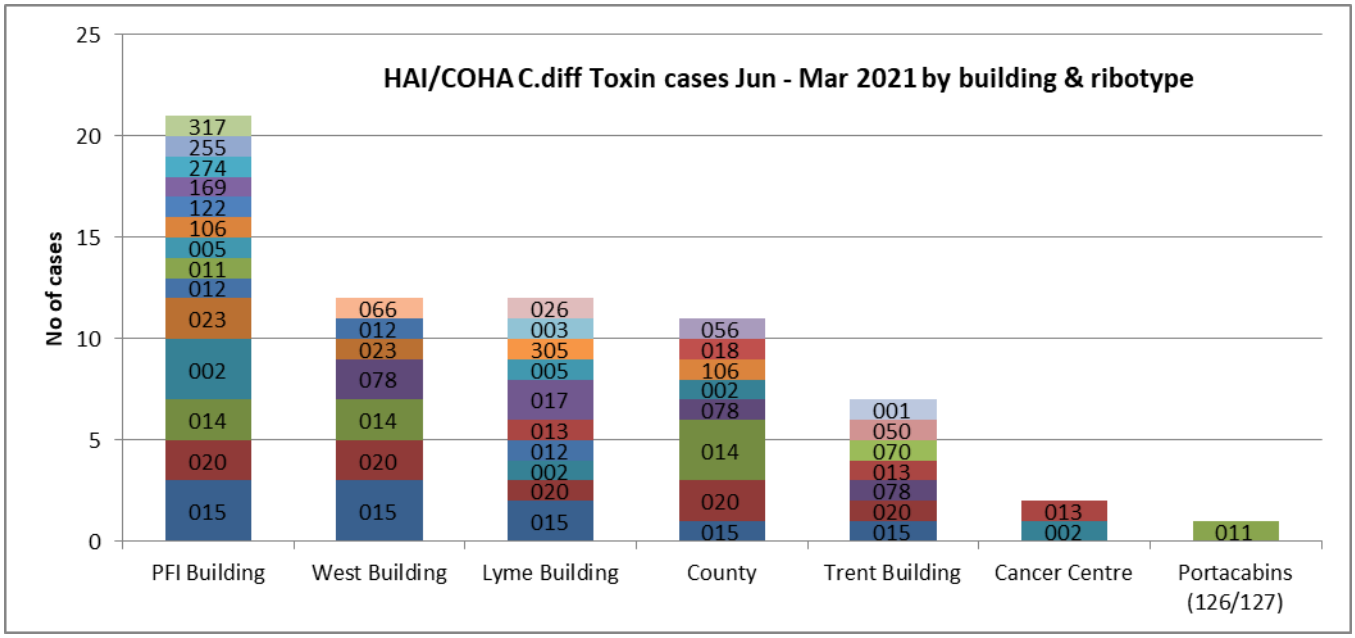
Ribotypes provide an indication if person to person transmission or environment to person transmission has occurred e.g. if the ribotype is the same. 027 ribotype is associated with more severe disease. Year to date we have not seen any 027 at UHNM.

Ribotyping was initially paused due to COVID -19 pandemic; however, Leeds Hospital is undertaking this work. Ribotyping resumed June/July 2020.

In the past, samples with the same ribotype were then examined further by way of variable-number tandem repeat (VNTR). This provides further analysis to establish if the same ribotypes match, indicating transmission between patients.

Due to COVID 19 pandemic pressures this further analysis - VNTR has not been possible, however, all Infection Prevention measures were instigated.

Ribotypes breakdown Clostridium *difficile* toxin



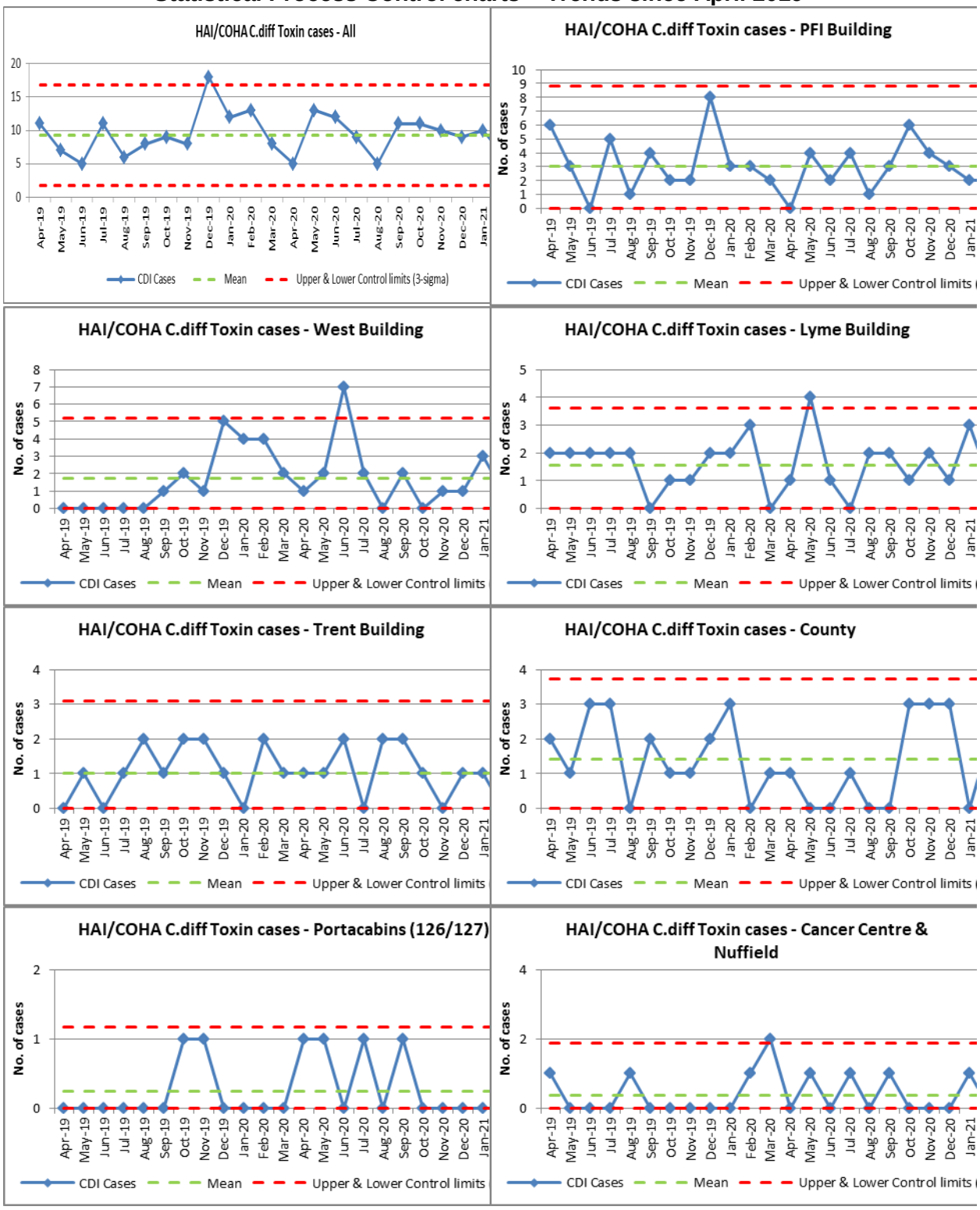
The chart above shows that a wide range of ribotypes have been seen across all buildings. 26 different numbered ribotypes across 66 cases, since testing resumed in June/July.

The 3 most common ribotypes were identified across a range of wards: Ribotypes 015, 020, 014.

One ward at County Hospital recorded 2 samples with the same ribotype 014. These samples were taken 44 days apart (not within 28 days) with no overlap of patient stay/journey.

One ward at Royal Stoke Hospital recorded 2 ribotypes 017 toxin cases. 1 x HAI, 1X COHA. Samples were taken over 28 days apart, however, inpatient stay overlapped. IP measures were instigated.

Statistical Process Control charts – Trends since April 2019



The charts above show cases in SPC format, with the monthly average for each building in green. 6 of the charts show stable patterns but the following SPC rules are triggered:

- West Building: an unusually high number in June 2020 (7 cases). There have been 22 cases YTD for 2020-21 compared to 19 cases over the same period last year.

- County: 8 months below the average between February and September 2020. This could be partly to do with activity at County staying lower for longer compared to Royal, following the drop at the first lockdown. A number of wards at County had single room availability increased following refurbishment.

In all cases control measures are instigated immediately, and RCA's are reviewed. Each inpatient is reviewed by the Clostridium *difficile* Nurse at least three times a week, and forms part of a weekly multi-disciplinary review where the patients' case is discussed, including antibiotics and where necessary feedback to Ward Doctors is given.

All HCAI CDI toxin cases are subjected to a Root Cause Analysis (RCA) and each case discussed with Head of IP and Clinical Commissioning Groups to decide their avoidability (lapses in care), with feedback to the IPCC and Divisions, with the Divisions to action Duty of Candour where necessary. Decisions on avoidability were paused due to COVID 19 pandemic. The avoidability panel will recommence from April 2021onwards cases.

UHNM closely monitor Periods of Increased Incidence (PII) of patients with evidence of toxigenic Clostridium *difficile* in any ward or area. The definition of a PII is two or more patients identified with evidence of toxigenic Clostridium *difficile* within a period of 28 days and associated with a stay in the same ward or area or outbreak if proven to be the same strain of Clostridium *difficile* by variable number tandem repeat analysis VNTR (DNA sequence). Equal Infection Prevention actions are instigated in both PII and outbreak instances.

Wards with HCAI CDI are placed on barrier cleans for a total of 28 days provided no further HCAI cases are reported from the area, in addition wards with a PII undergo a full terminal clean.

Sporicidal disinfectant is used routinely across UHNM for cleaning of the general environment and non-invasive equipment used in wards/departments e.g. commodes. Emergency portals are on a routine six monthly deep clean programme in addition to all other cleans.

The above approach has assisted greatly in the early identification and termination of any outbreaks of CDI.

Fidaxomicin is used as first line treatment for patients with a high risk of recurrence of C.*difficile*

Criteria for use

- Aged 65 years or over and /or
- Recurrent CDI cases
- Concomitant systemic antibiotics treatment for an indications other than CDI
- Patient severely immuno–compromised

In addition a switch to fidaxomycin is undertaken in any patient, if treatment with several days of oral vancomycin has failed clinically, and the likely continuing signs/symptoms are caused by CDI.

Faecal microbiota transplant (FMT) involves the infusion of healthy human donor flora bacteria into the bowel of the affected patient. The indications for the treatment were either recurrent diarrhoea or no response to aggressive CDI management.

Education is a key aspect of helping to promote the prevention of Clostridium *difficile* within the Trust. Assisting with staff knowledge of stool sampling practices and Clostridium *difficile* risks factors.

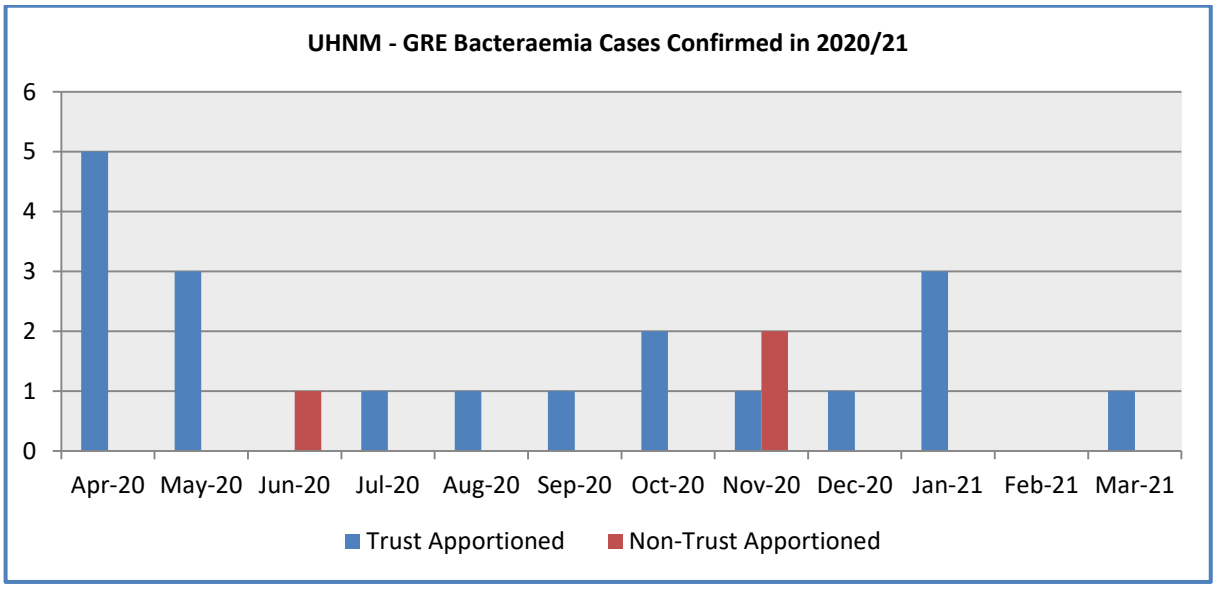
A programme of Clostridium *difficile* educational is in place, with sessions extended to include non-clinical staff such as Domestic Staff, plus the introduction of online Clostridium *difficile* education.

A top tips cards for staff are issued to staff during the education sessions, again promoting sampling practices and the 'Pooh' help line.

All patients with CDI are provided with an information leaflet which contains the Clostridium *difficile* passport (green care), this card is for the patient to keep and then show to any doctor, pharmacist, dentist or healthcare provider.

Glycopeptide Resistant Enterococcus (GRE) Bacteraemia
Enterococci are bacteria commonly found in the bowel and GRE are enterococci that have become resistant to glycopeptides (for example vancomycin). Reporting of bacteraemia caused by GRE has been mandatory for NHS acute Trust in England since September 2003.

During 2020-21 the Trust reported 22 of this type of blood stream infection (see chart below), with 19 cases recorded at UHNM in 2019-20.



Carbapenemase – Producing Enterobacteriacea (CPE)
Public Health England published a toolkit for the early detection, management and control of CPE in December 2013. The toolkit provides expert advice on the management of CPE to prevent or reduce the spread of these bacteria into (and within) health care settings, and between health and residential care settings.

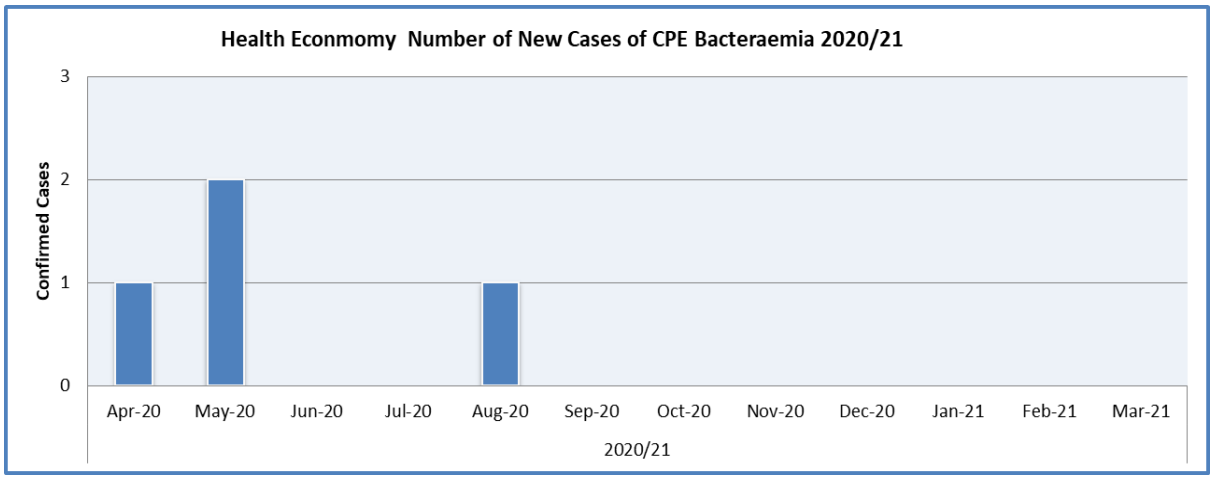
A Trust CPE policy has been in place for some time; this reflects screening guidance recommended by Public Health England.

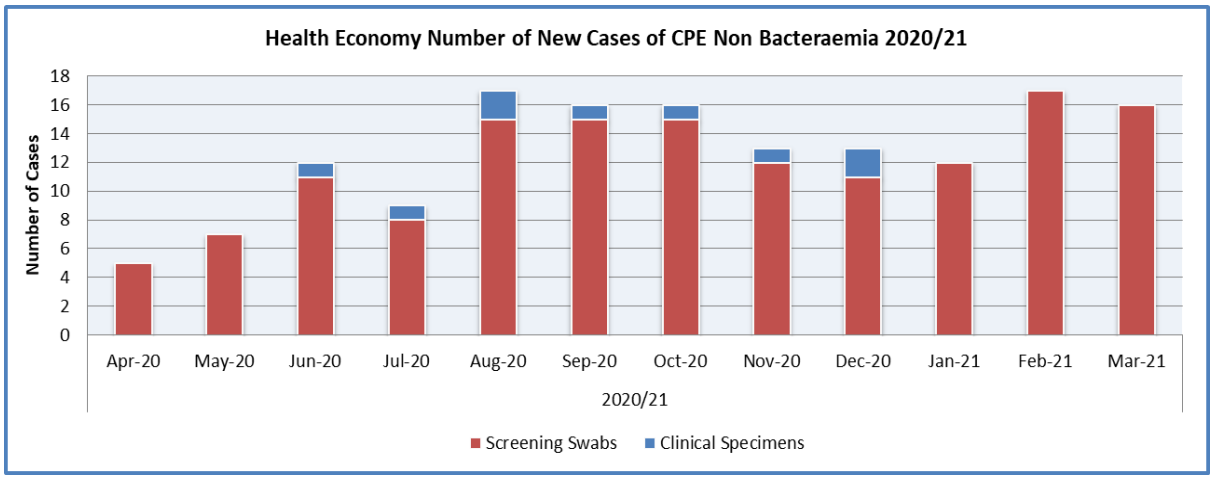
In addition to national guidance UHNM perform routine admission and weekly screening on the following wards: Adult Intensive Care Unit, Renal Ward, Infectious Diseases Ward, and all Elderly Care Wards.

Routine additional weekly CPE screening for the elderly care wards was paused and switched to risk based screening due to the COVID 19 Pandemic and laboratory pressures.

A screening close contact flow chart remains in place to assist staff in the clinical areas where contact screening of patients is required.

UHNM screening method (for rectal swab & catheter sample urines) uses culture plates that can detect both ESBL and CPE, for identified hospitalised close contacts of confirmed CPE UHNM PCR tests are performed on rectal swabs to enable rapid results and subsequent actions.

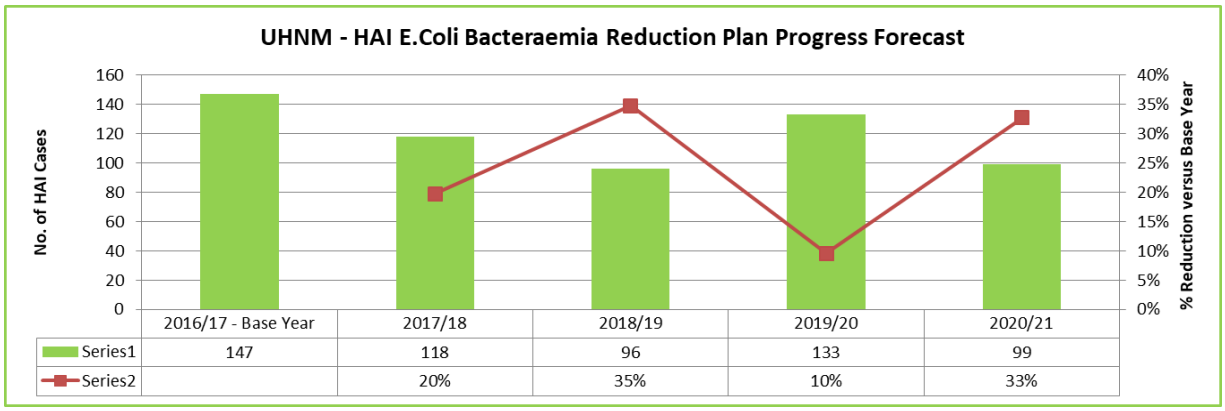

Health Econmomy Number of New Cases of CPE Bacteraemia 2020/21
Confirmed Cases
3
2
1
0
Apr-20
May-20
Jun-20
Jul-20
Aug-20
Sep-20
Oct-20
Nov-20
Dec-20
Jan-21
Feb-21
Mar-21
2020/21


Health Economy Number of New Cases of CPE Non Bacteraemia 2020/21
Number of Cases
18
16
14
12
10
8
6
4
2
0
Apr-20
May-20
Jun-20
Jul-20
Aug-20
Sep-20
Oct-20
Nov-20
Dec-20
Jan-21
Feb-21
Mar-21
2020/21
Screening Swabs
Clinical Specimens

Gram –Negative Bacteraemia

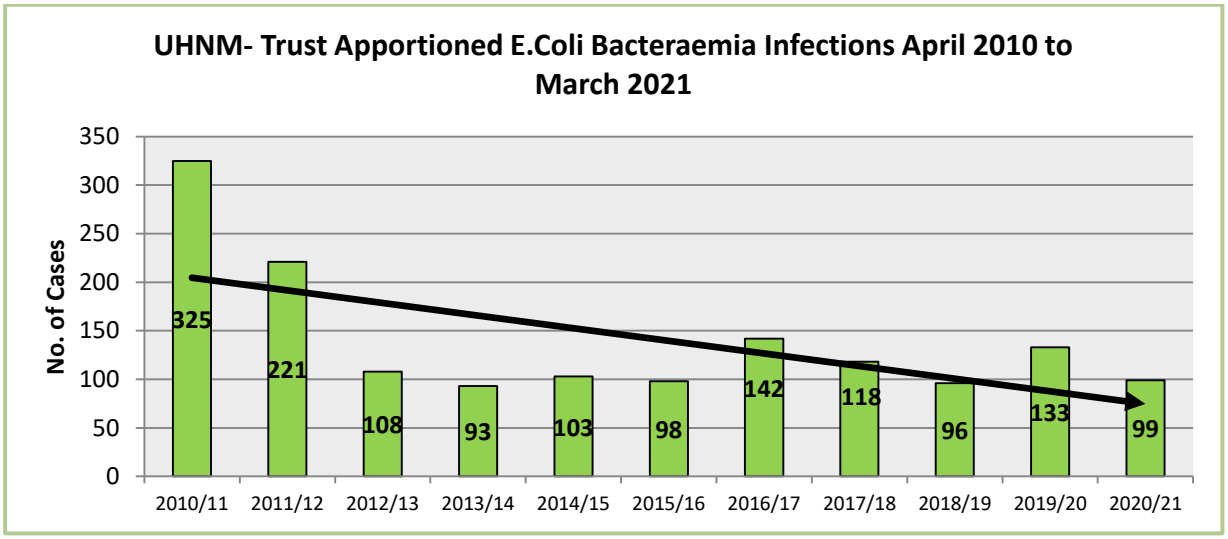
The national ambition to halve healthcare associated Gram-negative bloodstream infections and halve inappropriate antimicrobial prescribing by 2021 was announced in 2017. The date for attainment of a 50% reduction in healthcare associated Gram negative BSI's has since been revised to March 2024, with a 25% reduction by March 2021. This is due to the complexity of this challenge with more than 50% of infections occurring in people outside of healthcare settings. We know GNBSI cases can occur in hospitals however, half of all community onset cases have had some healthcare interventions either from Acute, Primary or Community Care. Therefore, we can only achieve the reductions by working together across the whole Health and Social Care sectors. A Healthcare Economy approach to reducing E.coli BSI's continues to be the focus. Gram-negative bloodstream infections are believed to have contributed to approximately 5,500 NHS patient deaths in 2015

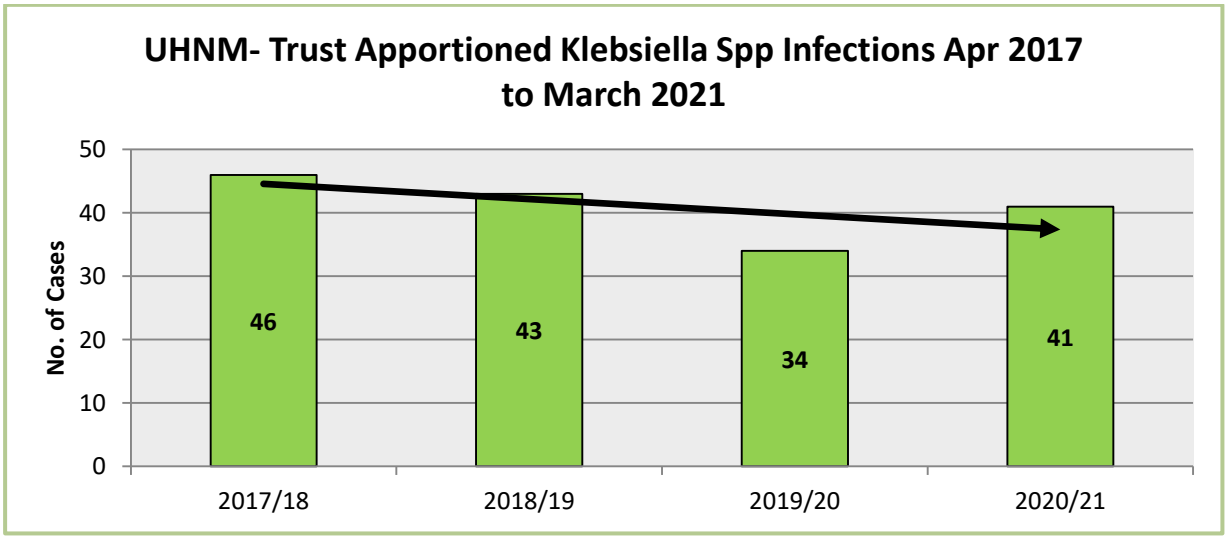
UHNM achieved an almost 33% reduction in HAI E.coli bacteraemia to fiscal year end 2021 (in comparison to baseline figures), however it must be noted that the Trust experienced lower than normal bed occupancy throughout 2020-21 due to the Covid-19 pandemic.

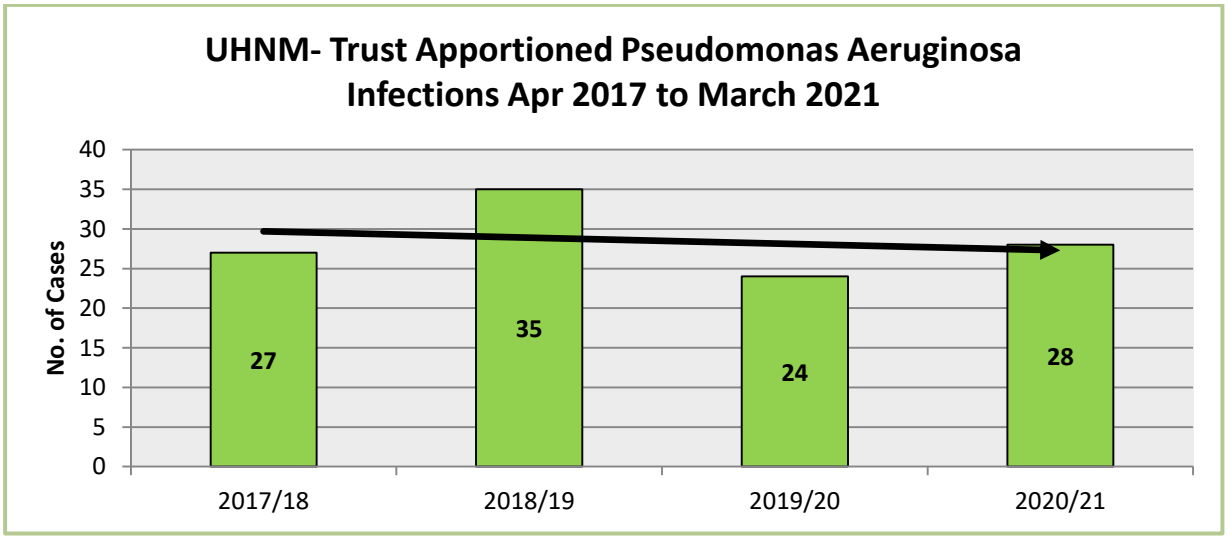


The following charts shows the quarterly numbers and trend of HAI E.Coli cases reported to PHE since the implementation of the reduction plan. The Trust is working with the CCG to ensure a Health Economy approach to achieving this aspirational target.

Gram- negative Bacteraemia Trust Apportioned







Pseudomonas aeruginosa is a Gram-negative bacterium often found in soil and ground water. It is an opportunistic pathogen which rarely affects healthy individuals, however, it can cause a wide range of infections, particularly in those with a weakened immune system e.g. cancer patients, new-borns, people with severe burns and diabetes mellitus or cystic fibrosis.

To reduce the risk of water borne infections, clinical areas have an on-going responsibility to identify any unused or infrequently used water outlets and to implement flushing regimes as specified in the Water Safety SOP, available via the Trust Infection Prevention intranet page.

Collaborative work has recommenced with Tissue Viability to standardise urinary catheterisation packs this was following completion of a joint BARD/Trust catheter associated urinary tract infections (CAUTI) steering group 'Zero-in' audit of Trust catheter usage in 2019. BARD catheter trays have been implemented at County Hospital site from October 2019, following training by BARD staff. An ANTT Clinical Guideline for catheter insertion utilising the BARD catheter trays is now complete and will be made available via the IP page of the Trust intranet. The BARD catheter trays are accredited by the ANTT organisation. A urinary catheter passport and urinary catheter patient information document is currently under review, it is anticipated that this will be a joint MPFT and UHNM document. Follow-up of these projects were initially paused during the Covid-19 pandemic.

Delivery of the Trust gram-negative action plan is monitored weekly by the Infection Prevention Senior Sister for the Clinical Surveillance Team and reviewed formally with the Deputy DIPC monthly. Progress is shared with Trust IPCC and monitored in Divisional Infection Prevention meetings and presented a CQRM monthly as per HCAI contractual requirements if required, and also shared with the CCGs Head of Infection Prevention & Control.

The action plan themes are currently identified as:

1. Surveillance
2. Antimicrobial prescribing
3. Urinary Tract Infection (UTI)
4. Catheter associated urinary tract infection (CAUTI)
5. Hydration
6. Skin and soft tissue / Oral hygiene/denture in the elderly / SSIS
7. Device related - vascular access device (VAD) care
8. Hand Hygiene
9. Learning – patient information and education

The Trust gram-negative layout / format has been amended to better reflect the Health Economy approach.

Candida auris

Public Health England produced a document - Guidance for the laboratory investigation, management and infection prevention and control for cases of *Candida auris(C. auris),* which is a yeast species .

C. auris is a recently identified *Candida* species that has been associated with infection and outbreaks in healthcare settings on five continents including the UK. It has been isolated from a range of body sites, including skin (very common), urogenital tract (common), and respiratory tract (occasional), and resulted in invasive infections, such as Candidaemia, pericarditis, urinary tract infections and pneumonia.

C. auris affects both paediatric and the adult population, and has predominantly been identified in critically unwell patients in high dependency settings.

As with other organisms associated with nosocomial outbreaks, it appears to be highly transmissible between patients and from contaminated environments, highlighting the importance of instituting effective infection prevention practices.

A screening policy, guidance on treatment and infection prevention precautions is included in the Infection Prevention Questions and Answers Manual.

COVID-19 Pandemic

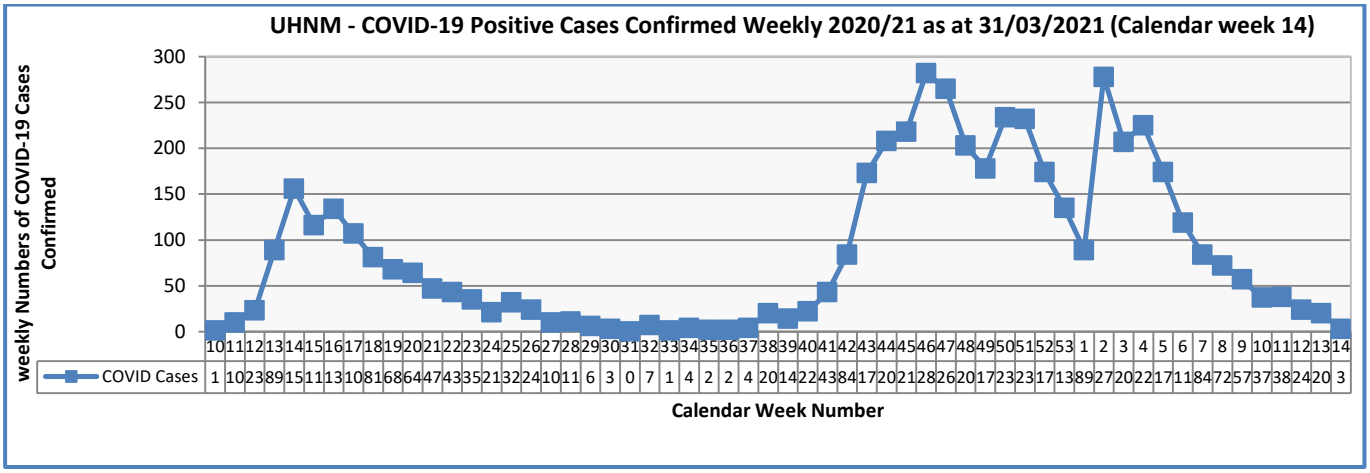
As was seen from all the media reports around of the COVID -19 pandemic, PHE and NHSe/i led the national contingency planning for this. This is a global public health emergency.

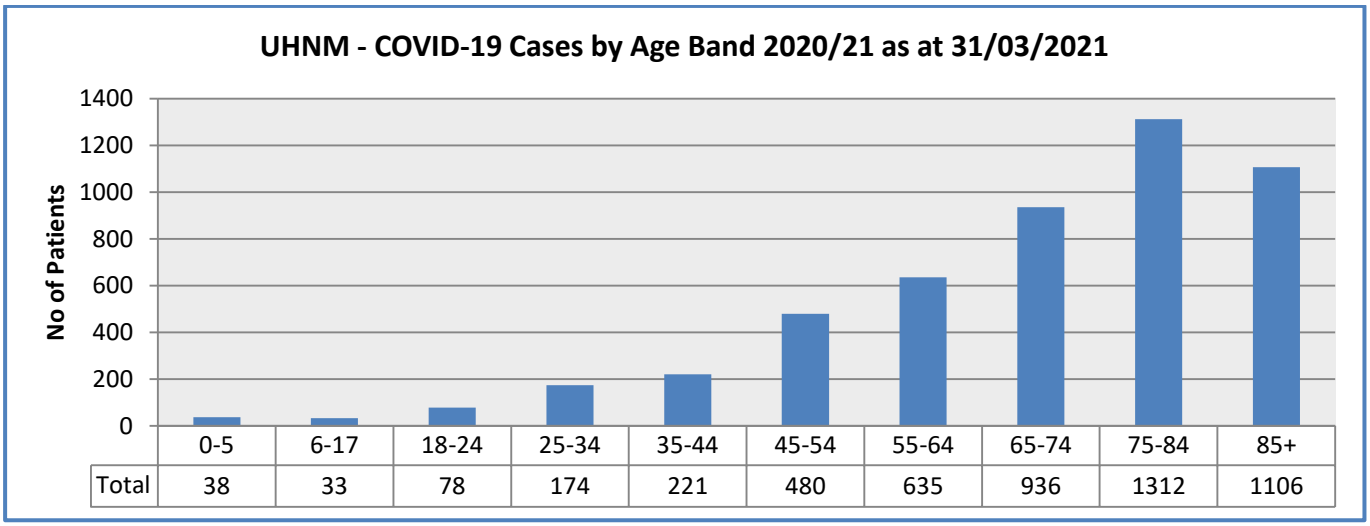
UHNM has established a robust command and control process to respond to the Pandemic, which included daily Tactical, Clinical, Non-Clinical and Strategic meetings where information was communicated, decisions made and all issues discussed.

As this is a dynamic situation planning assumptions and response are updated constantly with the support of the Chief Nurse/DIPC.

The Infection Prevention Team has been fundamental in this collaborative Trust wide work.

During March 2020 UHNM started to see their first COVID-19 cases. As at March 31st March 2021 laboratory confirmed cases totalled 5013 with 4703 of the patients involved becoming hospitalized. The following charts show the weekly numbers of new cases confirmed and the age groups of the patients who tested positive.





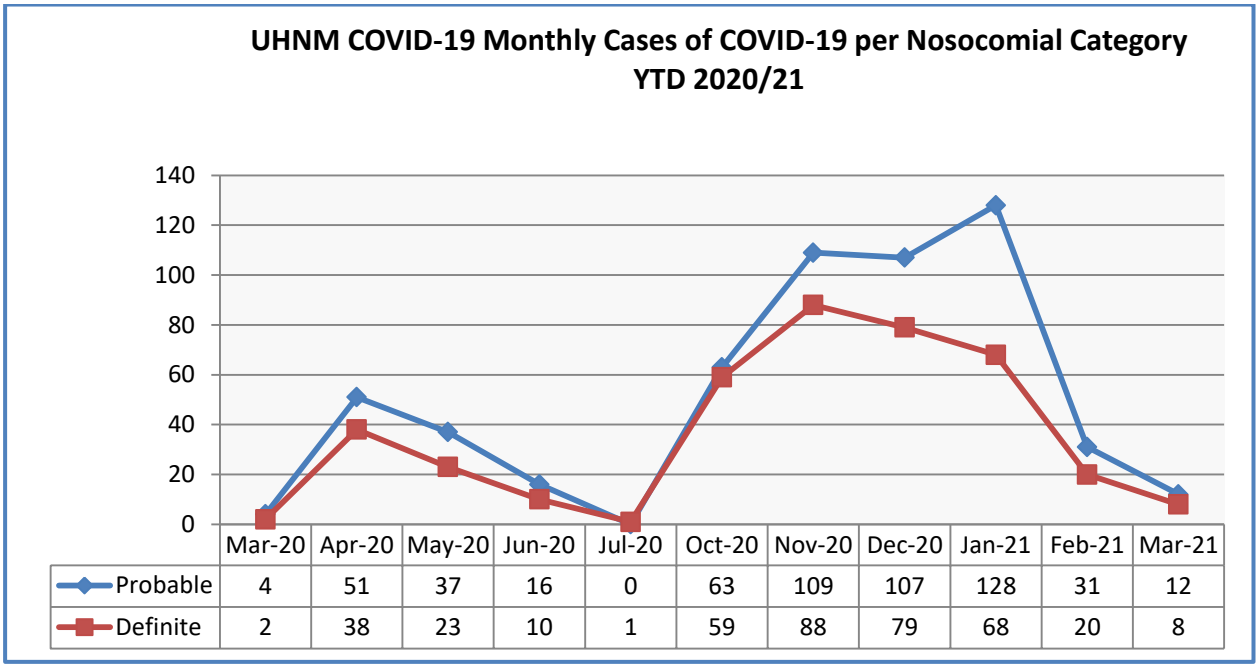
	0-5	6-17	18-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Total	38	33	78	174	221	480	635	936	1312	1106

In June 2020 NHS England issued instructions to all NHS Trusts to submit data relating to their nosocomial infection levels of COVID-19.

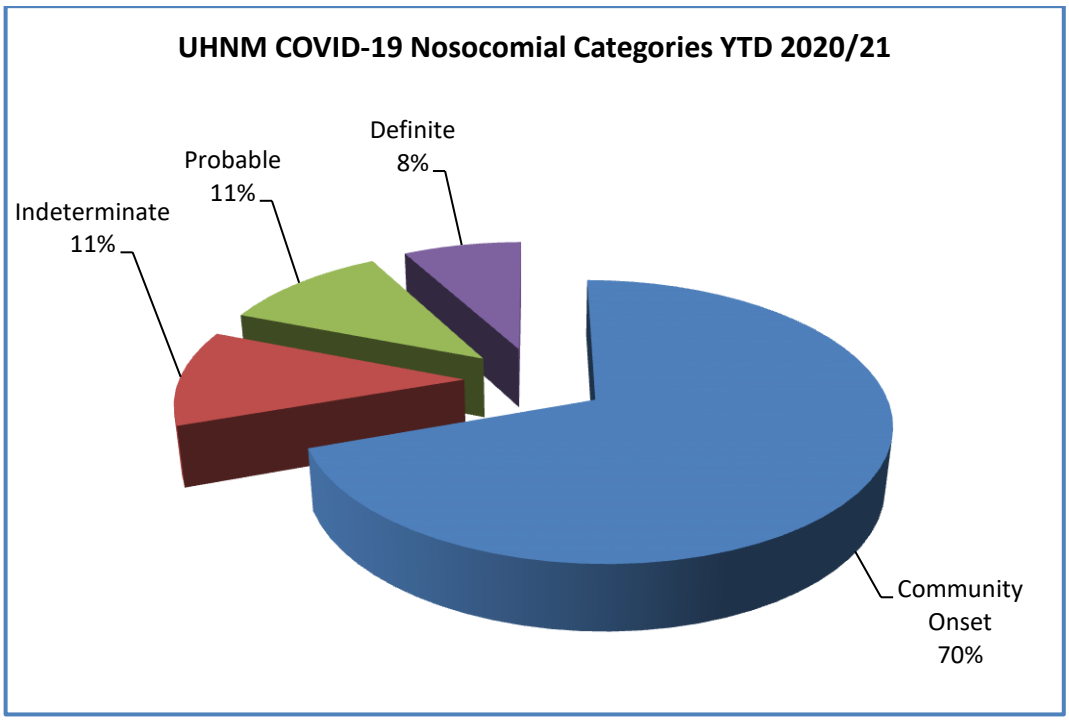
The 4 categories of apportionment of cases for determining the probability of a case being hospital acquired or not are as follows (N.B: the first day of admission counts as day 1of the admission spell):

- **Community-Onset** – First positive specimen date <=2 days after admission to trust
- Hospital-Onset **Indeterminate** Healthcare-Associated – First positive specimen date 3-7 days after admission to trust
- Hospital-Onset **Probable** Healthcare-Associated – First positive specimen date 8-14 days after admission to trust
- Hospital-Onset **Definite** Healthcare-Associated – First positive specimen date 15 or more days after admission to trust.

The following chart shows the monthly trend within each category of apportionment since March 2020, whereas the second chart shows the overall percentage split of cases within each category for all patients who became hospitalized at the point of confirming being COVID-19 positive.



	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Probable	4	51	37	16	0	63	109	107	128	31	12
Definite	2	38	23	10	1	59	88	79	68	20	8



UHNM has guidance on screening, testing and repeat testing for Covid-19 coronavirus and interpretation of test results in relation to lifting Infection Prevention (IP) in place. A COVID 19 resource page on the Trust intranet was developed which is updated on a regular basis in line with new or changing guidance from NHSI and PHE.

Root cause analysis are required for all Probable and Definite HAI Covid-19 cases which are discussed at Divisional Meetings.

COVID 19 themes report is also submitted to the Infection Prevention and Control Committee which is held BI monthly.

Definite Nosocomial COVID-19 deaths mortality reviews are due to commence during April 2021and will be led by UHNM Medical Director.

COVID 19 Outbreaks

At UHNM as soon as a suspected outbreak is triggered an immediate virtual meeting is held with the Chief Nurse/DIPC, Infection Prevention Doctor, Deputy Chief Nurse, Deputy Medical Director and Deputy DIPC who decide the immediate actions required, including whether to close the affected area to new admissions.

These control measures include:

- Isolation of positive patient(s)
- Symptomatic staff cases would be self-isolating, as per policy
- Terminal clean and barrier cleans
- Screening of contacts using ILOG number; any discharged patient deemed as a contact is contacted
- Unannounced IP team visits and refresher training
- Staff screening may be instigated using a separate ILOG and swabbing team with strict staff lists, including medical, nursing, AHP, pharmacy, cleaning and dietetic teams
- iiMarch form/NHS England outbreak system completed immediately, and submitted daily to the local and regional incident centres
- At least twice daily support visits to the outbreak area to provide support
- Regular updates to the Chief Nurse/DIPC
- Reactive media statement prepared
- Surveillance continues for 28 days after the last case before the outbreak is closed.

Outbreak meetings are convened with invitations to external colleagues in PHE, NHSe, local authority public health and CCG. These meetings are minuted with actions undertaken reviewed and any additional measures agreed on.

UHNM has twice weekly covid-19 meetings to review local community data, any probable and definitive nosocomial cases, in addition to any new guidance.

A COVID19 swabbing training video was developed and rolled out on swabbing technique, to help ensure any false negative results are minimised as far as possible due to technique.

Infection Prevention Board Assurance (BAF)

The Board Assurance Framework is a self-assessment compliance framework with Public Health England and other COVID-19 related infection prevention guidance. This enables the Trust to identify any areas of risk and show corrective actions taken in response. The framework is structured around the 10 existing 10 criteria set out in the code of practice on the prevention and control of infection which links directly to the Health and Social Care Act 2008.

Background

Understanding of COVID-19 has developed and is still evolving. Public Health England and related guidance on required Infection Prevention measures has been published, updated and refined to reflect the learning. This continuous self- assessment process ensures organisations can respond in an evidence based way to maintain the safety of patients, services users and staff.

Each criteria had been risk scored and target risk level identified with date for completed. The self-assessment sets out what actions, processes and monitoring the Trust has in place for COVID-19.

The BAF is a standing agenda item at IPCC and presented to Quality Governance Committee and Trust Board.

Audit Programme to Ensure Key Policies are Implemented

UHNM has a programme of audits in place, undertaken by both clinical areas and the IPT to provide assurance around practice and ensure that areas are consistently complying with evidence based practice and policies. Action plans are devised by areas where issues are highlighted and fed back to the IPCC via the Matron for the area.

The audit tools for general ward areas are designed to ensure relevant to that Clinical Area. In addition the IPT completed additional audits where infection numbers are highest or where there appears to be an identified risk concern, so improvements in the care process can be identified quickly and put into action.

Check and Prompt Audits

The check and prompt audits continued as part of the Trust's Clostridium *difficile* plan. These audits are undertaken by the IPT to review patients with a hospital stay of 3 months, 6 months and 9 months. The objective is to provide assurance for common IP interventions and proactively seek improvements where necessary to reduce the risk of health care acquired infections.

Audits of Hand Hygiene Practice

Hand hygiene remains central to the audit programme. There is a Senior Nursing Assistant within the IP Team who undertakes unannounced random hand hygiene assessments in clinical areas, as well as providing weekly hand hygiene training sessions.

The Trust continues to focus on:

- Alcohol hand rubs at the point of care, prominently positioned near each patient or staff carriage so that hands can be cleaned before and after care within the patient's view.
- Audit of hand washing practice at least monthly, Wards that do not achieve 95% repeat the audit after two weeks.
- Patients are encouraged to challenge staff if they have any doubts about hand hygiene and in cases of repeated non-compliance, escalation of concerns.

Staff Information

- COVID 19 intranet page which includes PPE information, posters, guidelines and questions and answers.
- Alert organism surveillance is reported to the organisation by the Infection Prevention Nurses daily.
- Monthly ward based/Divisional surveillance data is produced, including surveillance, information on MRSA, Clostridium *difficile*, ESBL, MGNB and antimicrobial. This information is used to update ward dashboards which are on display on the wards; this informs the public on ward performance.
- IP promotional activities have been held throughout the year promoting infection prevention with good practice being targeted at both staff and visitors to the Trust.
- Intranet: IP continues to make use of the intranet for providing staff with an easy access portal for information, policy guidance and IPT contact details. This information is regularly updated.
- IPT continue to lead the Infection Prevention Link Practitioner scheme.
- Norovirus and other toolkits are available for all ward areas. The toolkits include everything that staff require to help manage infections, including posters and information for relatives/visitors.
- Posters and information leaflets are displayed throughout the Trust. These provide key infection prevention messages and actions for staff, public and visitors.

Staff Training

The IP Team continue to have a strong training role within the UHNM, educational sessions have been delivered throughout the year. These have included on line mandatory sessions, in addition; Sepsis, MRSA, CPE, MRSA screening and decolonisation, influenza, flu and COVID 19 vaccination, norovirus, Clostridium *difficile,* winter planning, water safety/flushing, personal protective equipment (donning and doffing) and COVID 19 training.

Training has also been provided for staff who have been required to use air powered respirators. Standard operating procedures (SOP) for their use and maintenance have been developed between Infection Prevention and Health and Safety Department.

A number of Infection Prevention educational sessions are also available via the Trusts online system.

Mask Fit Training

IP have provided extensive sessions for FFP3 mask fit testing sessions and training for FFP3 masks fit cascade testers who are in place throughout the Trust. This enables FFP3 mask fit testing of staff within their own clinical area.

Mask fit testing has proven to be challenging during the COVID 19 pandemic, this was due in part to the make/model of FFP3 masks provided to the Trust through the National supply frequently changing. Health and Safety Executive (HSE) denotes that the wearer must only wear the FFP3 mask that they have been fit tested to wear. Frequent changing of the make/model of mask requires re fit testing for staff.

Seasonal Staff Influenza Vaccination Campaign

Seasonal influenza staff vaccination campaign is well established at UHNM and is a year round process.

COVID 19 vaccination

UHNM was selected as one of the first 50 COVID -19 vaccine hubs across the UK.
Our campaign commenced on 9th December 2020 and ran till 1st April 2021. During this time we administered around 43,000 COVID vaccines ensuring approximately 21,000 people received 2 doses. Not only did we vaccinate all the UHNM staff but we helped to protect some of the local communities over 80 year olds, this increased to over 70s later in the campaign with the inclusion of: local care home staff, neighbouring trusts including MPFT and Combined Healthcare, and many other healthcare providers within the wider community including dentists, opticians and under takers.

We had a fabulous response from all staff within the Trust to assist with the roll out with over 190 vaccinators including many consultants, nurses, and therapies staff. We also had exceptional support from the executive team with the CEO, Chief Nurse, Medical Director, and COO all offering their time to vaccinate. Support was also given from neighbouring Trusts with their vaccinators joining our team. The Team also consisted of many staff working over and above their normal working hours booking appointments, manning the helpline and assisting with admin duties in the clinics. We aimed to make the vaccine as easily accessible as possible and set up 3 vaccine hubs across the Trust, 1 at County Hospital and 2 at Royal Stoke hospital.

The campaign was a massive success within our Trust due to everyone's dedication and willingness to help rollout the largest vaccination programme the Trust and the NHS has ever seen.

IP Link Practitioner Scheme

The IPT continued to support the IP Link Practitioner with most areas having a designated link member of staff. This Scheme is open to all staff as everyone has an important role in infection prevention and cascading best practice in their area of work.

Estates

Education sessions for retained estates was undertaken covering basic Infection prevention principles. This training was well received by the department.

Shadowing

During 20/21 Student Nurses from Keele University allocated to the IPT was paused due to COVID 19 pandemic.

Aseptic Non Touch Technique (ANTT)

Healthcare associated infections (HAI) can be significantly reduced when effective aseptic technique is practised. UHNM adopted ANTT in 2015 as the standard for all clinical procedures. The Infection Prevention Clinical Surveillance Team (CST) work with clinicians to

ensure that ANTT is embedded into all policies, protocols, guidelines and training. The ANTT cascade trainer training process has been updated, as has the ANTT Cascade Trainer 'Role and Responsibilities' document, providing clarity of the role and Trust expectations and assisting managers to allocate the role to an appropriate team member. ANTT Theory sessions recommenced in April 2021 (monthly at County and fortnightly at RSUH). ANTT resources are made available via the IP page of the Trust Intranet.

The Trust's My ESR ANTT theory package was launched in August 2018. Completion of this ANTT update is required on an annual basis for all clinical staff, however uptake is poor. CST have applied for this important annual update to be included within the Trust's Statutory and Mandatory esr matrix for all clinical staff and are awaiting on an update on for this. Practical assessments are able to be recorded on erostering as a clinical skill by Department Managers to enable an overview of how many staff have completed practical assessments and are competent.

A UHNM corporate audit of ANTT was postponed due to the Covid-19 pandemic and is now tentatively planned for July 2021. It will take the format of a questionnaire and will focus on staff knowledge of ANTT theory. This will be a collaborative audit with the UHNM Quality, Safety and Compliance Department.

CST, in conjunction with BARD/BD and ANTT.org, have created an ANTT Guideline to support the roll-out of BD urinary catheter trays across the Trust.

CST worked with lab staff to create knowledge and awareness of a change in blood culture bottles used throughout the Trust. Trust changed to BacTAlert blood culture bottles in February 2021.

ANTT update sessions continue for individual clinical areas, as required and to support with any PII.

Through attendance at the Trust Clinical Product Evaluation Group (CEPEG) standardisation and suitability of equipment and medical consumables continues to be promoted across the Trust

Staff Supervision

Infection Prevention Team are allocated their own areas of responsibility for wards/departments/Matrons. This enables IPNs to link in with ward staff to provide relevant training and expert advice to staff, as well as monitoring compliance in those areas. In this way, the work of staff in the Trust was subject to scrutiny and supervision, but more importantly clinical staff felt supported and knew who their point of contact was.

Bed Management and Movement of Patients

The IPNs work closely with the Clinical Site Team especially during the winter period, providing timely and expert advice on the management and movement of potentially infected patients. There is a RAG rating system for the use of side room/isolation facilities available for staff to use to ensure that as far as possible informed decisions are made when considering patient placement.

COVID 19 hospital zoning and Divisional pathways had been devised.

Compliance Criteria 2:

Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections

Monitoring Processes

Royal Stoke
The cleaning provided at the Royal Stoke Hospital site for all clinical and non-clinical areas are split between an in-house cleaning team as well as an external cleaning contractor (Sodexo).

Monitoring Processes for In-house Retained Estate Cleaning/Domestic Services
The Retained Estate Team is responsible for cleaning approximately 21% of areas at The Royal Stoke, and provides a comprehensive 24/7 scheduled and ad-hoc cleaning service.

The Retained Team complete environmental audits which occur in all patient areas once every three months, this is carried out with representatives from the Retained Cleaning, Clinical and Estates Teams.

Self-monitoring is completed by the Retained Supervisory Team on a weekly basis, to ensure standards are maintained throughout all of the retained areas. If there are areas of concern, the monitoring is increased until the Team are satisfied that the standards are being met. Spot checks and unannounced ad-hoc audit inspections are also carried out by the Management Team, the frequency of these is determined on a week to week basis.

The Retained Team are committed to providing an outstanding service which is reflected in the Environmental Audit scores and our Patient-Led assessments of the care environment (PLACE) results.

Representatives from the Retained Management Team also participate in any outbreak or periods of increased incidents (PII) meetings, when issues are identified on site.

Scheduled and ad-hoc meetings with Infection Prevention, Matron's and Clinical colleagues to regularly monitor, review progress and address/resolve any issues are held to ensure that standards and performance target and compliance is met.

Monitoring Processes for Sodexo Cleaning Services
Sodexo is responsible for cleaning approx. 79% of areas at The Royal Stoke and provides a comprehensive 24/7 ad hoc and scheduled cleaning service via a helpdesk on site. The contract in place ensures that all areas are cleaned to the 2002 NHS Cleaning Standards and are self-monitored at least once every 10 weeks. The Trust has a Contract Performance Management (CPM) Team in place to ensure that standards on site are maintained for Sodexo areas. The CPM Team work closely with Sodexo to drive and sustain improvements, concerns regarding cleanliness can be raised by all staff via the helpdesk route, and an escalation process exists should users feel that their concerns have not been addressed satisfactorily.

The CPM Team completes environmental audits which occur in all patient areas once every three months with representatives from the Clinical, Estates and Cleaning Teams present. In addition to this the CPM Team also provides representation for the Water Safety Group, Clinical Excellence Framework Group, as well as participate in any outbreak or periods of increased incidents (PII) meetings when issues are identified on site.

The CPM continue to work closely with Sodexo on-site, their National Senior Management Team, Matron's and Clinical colleagues to regularly monitor, review progress and address/resolve any issues or concerns promptly:

- Regular meetings between Sodexo management representatives and Trust clinical teams to review cleaning performance and ensure that improved performance is sustained and confidence in the service is maintained.
- Frequency of joint spot-checks and unannounced cleanliness audit inspections continue at an increased level.
- FM Team continue to work closely with the IPT.

Infection Prevention Meetings

- Monthly meetings are held between the IPT and CPM/Sodexo to review cleaning scores and discuss any areas of concern.

County Hospital

Monitoring Processes for Cleaning/Housekeeping Services

The County Team is responsible for cleaning all areas (with exclusion of Theatres) on this site, and provides a comprehensive scheduled and ad-hoc cleaning service from 6am – 10pm, seven days a week. In March 2020, due to the COVID pandemic, the Housekeeping service on site increased to a 24/7 service, mirroring the service provision at Royal in both retained and Sodexo serviced wards and departments.

The County Monitoring Officer completes environmental audits which occur in all patient areas once every three months; this is carried out with representatives from the Clinical locations. If areas raise concerns due to failures identified, they are re audited within that same quarter.

Self-monitoring is completed by the Housekeeping Supervisory Team on a weekly basis, dependant on risk rating of areas, to ensure standards are maintained throughout all of the retained areas. If there are areas of concern, the monitoring is increased until the Team are satisfied that the standards are being met. Spot checks and unannounced ad-hoc audit inspections are also carried out by the Management Team.

The County Team are committed to providing an outstanding service which is reflected in the Environmental Audit scores and our Patient-Led assessments of the care environment (PLACE) results (2018 & 2019 PLACE scores 100%).

Representatives from the County Management Team also participate in any outbreak or periods of increased incidents (PII) meetings, when issues are identified on site.

Scheduled and ad-hoc Meetings with Infection Prevention, Matron's and Clinical colleagues to regularly monitor, review progress and address/resolve any issues are held to ensure that standards and performance target and compliance is met.

PLACE Inspection

The annual PLACE inspection took place in October 2019 with results published in January 2020 for all Trusts. PLACE inspections for 20/21 have been paused due to the COVID -19 Pandemic.

Site Name	CLEANING Score %	FOOD Score %	PRIVACY, DIGNITY & WELLBEING Score %	CONDITION & MAINTENANCE Score %	DEMENTIA Score %	DISABILITY Score %
THE ROYAL STOKE UNIVERSITY HOSPITAL	99.94	94.75	90.17	99.51	90.34	92.45
THE COUNTY HOSPITAL	100	96.75	99.56	99.88	96.47	96.10
UHNM TRUST SCORE	99.95	95.03	91.49	99.56	91.21	92.97
NATIONAL AVERAGE	**98.6**	**92.2**	**86.1**	**96.4**	**80.7**	**82.5**

PLACE Scores 2019

Terminal Cleans

All emergency portals undergo a deep clean on a six monthly basis in addition to other cleans.

All terminal clean requests required within working hours are requested via the IPT. Requests for terminal cleans outside of these hours are requested via the Site Matron, and are completed by the respective teams to ensure that patient flow is not slowed down.

Radiator Cleaning

UHNM has a planned programme of radiator cover removal to allow for cleaning.

Food Safety

The Food Safety Task and Finish Group have developed and finalised documentation relating to food brought in for patients, these have been added to the FM services section of the intranet for use by the clinical teams. In the event that foods are brought into hospital the information is documented on the supporting form and the form retained at ward level for the duration of the patients stay.

The documentation has been developed to help explain to the patient, relatives and friends the reasons why certain foods should not to be brought into hospital for consumption by the patient. These are known as HIGH RISK FOODS which can cause food poisoning if kept in the wrong conditions.

A training module has been designed for staff who handle food and drink on behalf of patients and is completed via E-Learning on a biennial basis. The module will be available through the Electronic Staff Record.

Food Hygiene Inspection Royal Stoke University Hospital
The food hygiene inspection at RSUH was carried out by Stoke on Trent City Council Environmental Health Officer, Public Protection Division in January 2020 which resulted in the Royal Stoke Hospital Site being awarded five stars under the national food hygiene rating scheme.

Food Hygiene Inspection County Hospital
The food hygiene inspection at County Hospital by Stafford Borough Council's Environmental Health Inspectors in early 2019 has resulted in the hospital being awarded five stars under the national food hygiene rating scheme.

For the fourth year running, the catering department at County hospital has maintained a five star food hygiene rating for compliance in all aspects of food safety.

Food businesses are required by law to comply with food hygiene regulations as laid down by the Food Standards Agency and the public can find how compliant a food business is with legislation by logging on to www.ratemyplace.org.uk On the website, food businesses are rated on a star award system with five stars being the maximum achievement. Upon inspection, the Food Safety Officer, checks how well the establishment are meeting the law on food hygiene in the three areas below:-

Criteria Assessed
Compliance with food hygiene & safety procedures
Compliance with structural requirements
Confidence in management/ control procedures

Water Safety Group
The Water Safety Group is a sub group of IPCC and meets quarterly, reporting directly to IPCC. The Water Safety Group is chaired by the Deputy DIPC.

Management of Decontamination
Management and compliance currently falls into three distinct areas i.e.

- Estates – for medical device reprocessing equipment. UHNM provides Estates Services and also those provided by Sodexo as part of their estates (hard FM) management responsibilities within the PFI contract.
- Infection Prevention – for monitoring/audit of compliance of medical devices with Trust Policies and advise with pre purchase questionnaire (PPQ)
- User – to comply with Trust Policies and to ensure all decontamination equipment within their area is fit for use and subject to periodic testing and maintenance.

The Decontamination Group is a sub group of IPCC and meets monthly, reporting directly to IPCC.

Waste Projects

The close involvement of Infection Prevention has been crucial to the continued success of waste management projects.

Staff continue to help to prevent fluid leaks by:

1. **Correct Fluid Disposal**: Preventing fluid disposal into the offensive waste stream through ensuring that all areas of the Trust dispose of fluids in a correctly defined, standardised and consistent way.
2. **Effective Bag Tying:** learning the correct waste bag tying technique and using the SOP in order to eliminate any problems of fluid leaks at the moving and handling stage.
3. **Bin Washing:** Hopefully by preventing fluid leaks with proper disposal and bag tying leaks and splashes won't occur, however, there is an offensive waste bin washing process so that only clean bins are put back into the system.

A waste management policy remains in place having been devised to detail the specifics around handling infectious waste, use of PPE, securing bags, labelling, storage and the correct waste streams, colour codes and waste categories and points of contact.

Infection Prevention isolation signs depict the colour of waste bag for patients requiring isolation precautions. These continue to be used throughout the Trust.

Sinks

The Infection Prevention Team worked with closely with facilities to standardise the process in which hand wash sinks are cleaned to avoid contamination of the water outlet and address and any issues. SOP in place.

Cardiac Surgery Bypass Machine

In June 2015 MHRA issued a Medical Devices Alert concerning all heater-cooler machines used for cardiac surgery. This is part of a pan European issue following a case of post-operative wound infection from mycobacterium reported in Switzerland. A European wide surveillance programme has been established, led by PHE in England. A further MHRA MDA alert was issued in December 2016, together with a joint PHE/MHRA/NHS England Webinar on 27th March 2017 for all Acute Trusts in England that undertake cardiac surgery. Letters have been issued to all relevant patients as part of the UK wide initiative. UHNM, as are all cardiac surgery centres, continue to work closely with PHE and the MHRA on this initiative with regular updates provided to the IPCC. All required control measures were instigated

following the initial MDA alert in 2015, and continue to be in place together with Surveillance for any potential infections. No Mycobacterium chimaera has been identified with the machines at UHNM, which are regularly cleaned and tested as per national requirements.

Refurbishment Projects

The IPT provided advice on a number of planned programme of maintenance and refurbishment projects throughout the Trust, including advice relating to reconfiguration of clinical, non-clinical areas and social distancing to facilitate COVID-19 pathways and compliance with National COVID 19 guidance.

Compliance Criteria 3:

Ensure appropriate antibiotic use to optimise patient outcomes and to reduce the risk of adverse events and antimicrobial resistance.

Sepsis Team

Sepsis is defined as a life threatening organ dysfunction caused by a dysregulated host response to infection. It is a syndrome of physiological, pathological and biological abnormalities induced by infection. It is now a major public health concern (NICE UK Sepsis guidelines 2017).

There are 250,000 cases of sepsis in the UK each year resulting in between 52,000 and 68,000 deaths. That is more than breast cancer, bowel and prostate cancer combined. With effective screening and early treatment we can save 14,000 lives across the UK. The UK mortality rate for patients admitted to hospital with red flag sepsis can be up to 30%.

The Sepsis Team was established and has been in place from October 2016, comprising of a Sepsis Clinical Lead, Sepsis Fellow, Senior Sister, Sepsis Specialist Nurse and a Senior Nursing Assistant. The main aim of the team is to achieve the sepsis CQUIN compliance target, by ensuring that our patients are safe at all times, as well as reducing the mortality rate and morbidity. However, for 2019/2020 and up to present, the Sepsis CQUIN will be incorporated into the Trust contract, with stringent requirements and penalties remaining.

The Sepsis Team are working optimally and collaboratively with our AMR colleagues and front-line clinical colleagues to continue to raise awareness and propagate education and training in sepsis, which has clearly had a demonstrable effect. Sepsis training is now an integral part of the newly qualified nurses', Band 4 and Medical Staff. Working with our AMR colleagues ensures that there is an equal emphasis on sepsis screening, treatment and antibiotic stewardship.

National Sepsis CQUIN: There are three elements needed to be achieved and will remain into the contract:

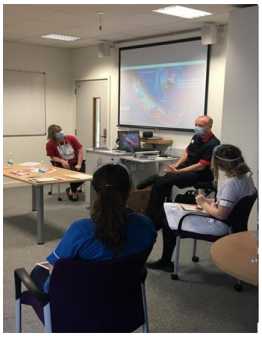
- All patients with a National Early Warning Score (NEWS) of five or greater (or three in a single parameter) need to be screened for sepsis.
- All patients that have red flag sepsis need to receive IVAB within one hour.
- All IVAB for sepsis patients have to be reviewed within 24 to 72 hours.

Challenges

The change of Modified Early Warning Score (MEWS) moving to the use of NEWS led to the increased sensitivity of triggering compared to previous models and subsequently adopted the NEWS 2 on 2018. The VitalPacs Sepsis alert system has helped clinical staff to identify those triggers and subsequent sepsis risk level. This helps ensure that not only are patients screened, but the appropriate risk level is identified.

On a national and local level the COVID-19 pandemic has presented new challenges in the last year, where in patients are more likely to develop sepsis or admitted with sepsis. The ability to deliver sepsis training to large groups of staff has been significantly compromised due to restrictions and social distancing requirements. In response to these challenges the Sepsis Team have;

- Increased focus of sepsis ad-hoc training and education around Sepsis in Emergency departments as well as on COVID-19 ward areas.
- Sepsis education and training continued and provided to all levels of clinical and medical staff during induction via Microsoft Teams where social distancing and space constrictions has been a challenge.
- Maintained sepsis actions in Emergency portals with additional on the spot training to available staff in clinical areas to support compliance.
- Working closely with quality nurses to ensure staff requiring additional support are identified and ultimately ensuring screening and IVAB within hour treatment will be achieved.
- Working out of hours to ensure regular night staff have been given the opportunity to attend training sessions.
- Arranged one to one meetings with clinical teams addressing and highlighting their concerns.
- Identifying areas of lower compliance through audit process and working collaboratively with those teams to help achieve improvement with sepsis compliance.



- Advocating the use of and compliance with VitalPacs and liaising with the VitalsPacs Team to ensure the sepsis module is fit for purpose and troubleshooting any issues that arise.

The Sepsis Team has put robust actions in place and is working closely with frontline staff, multi-disciplinary & senior teams, and medical staff to have a maximum effect on the achievement of the Trust's CQUIN/ contract. The aim is to protect patients from deadly conditions and ensuring that they are safe at all times.

Initiatives Undertaken

- The Sepsis Team continue the Sepsis Awareness Campaign taking place

during on World Sepsis Day each year on September 13th, since 2017.

- Creating new sepsis red flag cards and distributing Trust wide for continuous awareness. Additional cards also created specifically for community settings.
- Identifying Sepsis Champions (staff nurses/nursing assistant/ in house doctors/ANP) in each clinical area/divisions and planning Sepsis Champion Day training that includes workshops & simulation learning.
- Sepsis kiosks & face to face training with social distancing continued and provided to all staff including doctors. The aim to train as many departments throughout the year.
- The Sepsis Team have arranged to attend virtual conferences to update own sepsis knowledge and awareness and enhance own role through education and networking with teams from other trusts.
- Contributing to Trust Divisional IP meetings, supporting all areas and helping drive for compliance.
- Regular Strategic Sepsis & Antimicrobial Group meetings and Sepsis Team meetings put in place, to work optimally and collaboratively.
- Continuation of online training resource via ESR for staff nurses/doctors and other clinical staff with demonstrable great outcome.
- The Sepsis Team include Band 4 or Trainee Associate Practitioners, newly qualified nurses and student nurses in focused sepsis training to ensure confidence and awareness.
- Supporting the upcoming introduction of electronic VitalPacs (NEWS2) to A&E at both sites with additional training and awareness for these areas.
- Rewarding progress of specific clinical areas and individual staff with certificates in recognition of significant contributions and improvements in sepsis management.
- Collaborative work with UHNM charity team and creating a 'sepsis survivor' group where patients who have experience of sepsis can share their stories from a different perspective during selected training events to enhance awareness.
- Maternity department have recently implemented an electronic version of their newly updated MEOWS screening tool via K2 electronic system, proven at this early stage a huge success to support compliance and patients safety.
- Introduction of Sepsis 100 initiative, plan of campaign advert will come out Trust wide via communications once finalised.

Sepsis Team Achievement

The Sepsis CQUIN compliance achievement throughout the year of 2020/21 contract with the aim to maintain, sustain and embed good practice. Our sepsis robust actions remain in place and the sepsis team work closely with frontline staff, multi-disciplinary, senior teams, and medical staff to have a maximum effect on the achievement of the Trust's CQUIN/ contract. The support and hard work of all staff/senior team/divisions in the Trust is vital to protect patients from deadly conditions and ensure that they are safe at all times.

Antimicrobial Stewardship (AMS)

The Trust has an Antimicrobial Team (AMT) that supports the work of the Trust Antimicrobial Stewardship Group (ASG). The AMT consists of a Consultant Microbiologist, one WTE Advanced Pharmacist Practitioner (APP), one WTE Antimicrobial Nurse (AMN), the Infectious Diseases Specialist Pharmacist based at the Royal Stoke and the Antimicrobial Pharmacist based at the County. The latter two pharmacists provide sessional support to the ASG and

CQUIN work streams in addition to their substantive core clinical roles. The APP and AMN were appointed in 2016-2017 following a Business Case and have a key role in delivering the AMR CQUINs, carrying out targeted ward reviews of antibiotic prescribing (often supporting a Consultant Microbiologist) and providing strategic leadership to ensure the antimicrobial stewardship agenda remains a high priority across all clinical areas. The team is also supported on an ad hoc basis by a data analyst and clinical information technician as required to support the compiling of reports for submission to PHE and NHS E, and the compilation of pharmacy led antimicrobial audit data on a quarterly basis.

The expanded team brings clinical experience and expertise in all aspects of antimicrobial stewardship and, on behalf of the ASG, is supported in escalating prescribing or clinical issues relating to antimicrobials to the appropriate forum. The AMT has developed initiatives to drive forward good antimicrobial stewardship and promote awareness of the global rise in antibiotic resistance

The UHNM has continued to build on the foundations put in place over the last few years, core functions which are routinely undertaken include:

- A regular review of the ASG membership to include representatives from both hospital sites so that local champions will support engagement with good antimicrobial stewardship. The Terms of Reference have recently been reviewed and new members recruited to reflect diversity e.g. non-medical prescribers and junior medical representation.
- A regular update of the Trust Antimicrobial Stewardship Policy. Quarterly audits measure compliance with this policy, with an escalation process in place for clinical specialities that require support to achieve compliance.
- A rolling Antimicrobial Audit Programme in line with Start Smart then Focus has been in place across the Trust for a number of years. The results of the audits are available on the Trust Intranet so that trends can be reviewed by specialities and their peers. The ASG review and support the development of action plans in areas of poor compliance and, going forward, specialities will be required to report progress against to the ASG. This has been particularly important in supporting the achievement of the AMR CQUIN antibiotic consumption targets over the past few years.
- The Trust's Antimicrobial Treatment and Prophylaxis Guidelines were reviewed in response to global and national shortages of certain key antibiotics: alternative antibiotics were procured and temporary alternative guidance was issued.
- A full review of the UHNM Adult Antimicrobial Treatment and Prophylaxis Guidelines was took place during 2019/20. Successful collaboration with specialities resulted in the development of a number of new guidelines to rationalise antibiotic prescribing in line with good antimicrobial stewardship. This work is on-going to support appropriate prescribing during COVID19.
- The Antimicrobial Guideline App (Microguide) for mobile devices continues to support prescribers by facilitating easy access of antimicrobial guidelines at the point of prescribing. The web-based app allows more efficient updating of guidelines following review by ASG members. This year links to national guidelines have been embedded to facilitate timely access by prescribers
- There is an Antimicrobial Education and Training Strategy. All antimicrobial stewardship-related presentations are available on the Trust Intranet.

- Antimicrobial stewardship educational sessions for Pharmacy staff across both sites continue to be undertaken to support a uniform approach to antimicrobial stewardship and the quarterly antibiotic audit process. Sessions continue to be delivered on the increase in Gram negative infections and carbapenemase resistance, as well as key messages and supporting materials to support the CQUIN. Workshops on the prescribing, dosing and monitoring of two high risk drugs, gentamicin and vancomycin, are delivered as part of the antimicrobial stewardship induction programme to familiarise newly appointed pharmacists with the vancomycin and gentamicin dosing calculators and associated guidelines in place at UHNM, so that consistent advice and information is provided to prescribers and nursing staff.
- In addition to pharmacist awareness sessions, ad hoc sessions on AMS, gentamicin and vancomycin are provided for nursing staff, advertised via Trust Communications
- The AMT provides training to each intake of overseas nurses recruited to UHNM as well as the preceptorship nurse scheme. This is important to align practice amongst colleagues who may have worked in different Trusts (and countries) with different approaches to antimicrobial stewardship.

The following initiatives have continued throughout the year:

- A rolling programme of antimicrobial sessions for Nursing staff.
- Targeted ad hoc sessions for Specialities/Wards.
- The development of gentamicin/vancomycin workshops for nurses on doses, monitoring and side effects of these high risk antibiotics.
- Antimicrobial stewardship and antimicrobial resistance awareness sessions for Laboratory and Infection Prevention staff.
- Engagement sessions with prescribers, nurses and pharmacists in relation to the updated UHNM Adult Antimicrobial Treatment and Prophylaxis Guidelines.

There are 5 Consultant Microbiologists (one post is covered by a locum) and 2.6 WTE Consultant Physicians in Infectious Diseases, who provide antimicrobial stewardship by telephone and face-to-face on ward rounds and during teaching sessions. The Microbiology Department recently recruited 2 WTE staff grade doctors, and the team also includes one trainee from the West Midlands Deanery. Antimicrobial stewardship ward rounds continue to be undertaken on targeted wards on a daily basis which provide opportunities for the AMT to raise awareness and make timely AM interventions.

Antimicrobial consumption by Specialities and Wards was analysed on a monthly basis throughout the year to allow flexible targeted stewardship/antimicrobial review ward rounds for those areas requiring additional support in order to promote good antimicrobial stewardship and reduce antibiotic consumption. As part of the response to the COVID-19 pandemic, Micro ward rounds were suspended but these are now re-starting in a phased manner to replace virtual rounds held during the pandemic.

The AMS team also provides input into the OPAT, Clostridium *difficile*, Endocarditis / Valve, TVN/ Cat 4 ulcer MDT, Bone & Joint and Spinal MDTs.
The ASG, Microbiology and Pharmacy Departments work collaboratively to ensure that alternative agents are available for patients if first line antimicrobials become unobtainable.

In Year Initiatives:

For most of the year the AMS team were re-deployed to clinical duties to support front line work during the COVID 19 pandemic.

Support for European Antimicrobial Awareness day was provided virtually and with the support of the Trust social media team.

NHS E Antimicrobial CQUINs 2019-2020

Public Health England (PHE) & NHS Improvement postponed the annual CQUIN workstreams during the pandemic

Compliance Criteria 4:

Provide suitable accurate information on infections to service users, their visitors and any person concerned with providing further support or nursing/medical care in a timely fashion.

Communication Programme
The Trust has a dedicated Communication Team. Outbreaks where there may be interest from the media, the Communications Team are invited to meetings and their support and guidance on preparing Press statements is invaluable. The IP Team ensures that the Communications Team are involved in the following:

- Advertising infection prevention events.
- Communication campaign to inform GPs and the public around management of Influenza and Norovirus.
- Updating the Trust website.
- Press statements during outbreaks.
- Sepsis education
- Flu vaccination campaign.
- COVID-19 information and Posters.
- COVID 19 intranet and internet information.
- FFP3 /PPE information.

Trust Website and Information Leaflets
The Trust website promotes infection prevention issues and to guide people to performance information on COVID 19, MRSA, Clostridium *difficile* and other organisms.

The IPT have produced a range of information leaflets on various organisms.

UHNM subscribe to ICNet surveillance system which enables information to be shared with colleagues in the Health Economy.

The Trust has a policy on the transfer of patients between wards and departments.

Compliance Criteria 5:

Ensure prompt identification of people who have or are at risk of developing an infection so that they receive timely and appropriate treatment to reduce the risk of transmitting infection to other people.

Infection Prevention Nurses attend a daily review of laboratory alert organism surveillance attended by Consultant Microbiologists and members of the Laboratory Team.

The Trust has a policy for screening both elective and emergency patients for MRSA and a system is in place for monitoring compliance.

iPortal System

The Lead Consultant Microbiologist/Infection Control Doctor works closely with IM&T Team regarding patient alerts. This system provides clinical staff with real time alerts and access to information from other hospital systems. Infection Control real-time alerts on the iPortal system includes Red and Amber alerts for patients with a very recent and relatively recent history, respectively, of MRSA, CDI, PVL-toxin producing *S. aureus*, and ESBL or Carbapenemase producing multi-resistant Gram Negative Bacilli. These alerts enable staff on wards and departments to promptly identify patients who have recently had an alert organism identified, allowing wards/departments to timely isolate and follow-up patients appropriately and to prescribe appropriate empiric antibiotics if antibiotic treatment is indicated.

COVID 19 alert

Iportal alert for COVID -19 patients has been developed and throughout the year IP have worked collaboratively with IM&T Department and Microbiology to create Trust wide iPortal/Medway Covid-19 contact alert. This facilitates early identification and placement of contacts who are re admitted to the Trust.

Surgical Site Infection Surveillance (SSIS)

UHNM have continued to participate in the Public Health England (PHE) National Surveillance Program. The aim of SSIS is to enhance the quality of patient care by encouraging hospitals to use data obtained from surveillance to compare their rates of SSI over time and against a national benchmark rate, this information is used to review and guide clinical practice.

Methodology for Surveillance

The surveillance was undertaken by the Clinical Surveillance Team (CST). All eligible patients were reviewed 2-3 times per week and monitored for signs of infection, whilst an inpatient. Electronic tags were added to eligible patient records in ICNet to provide alerts if a patient was readmitted or had a wound swab sent for the duration of the surveillance period (30 days or 365 days if an implant is inserted at the time of surgery).

During 2020- 21 UHNM participated in the following PHE Surgical Site Surveillance:

SSI SURVEILLANCE 2020-21		
QUARTER	**PERIOD**	**SURVEILLANCE**
		Royal/County
1	Apr – Jun	*Deferred due to COVID-19 pandemic wave 1.*
2	Jul – Sep	Repair of Neck of Femur – surveillance period complete. Figures submitted to PHE.
3	Oct – Dec	*Deferred due to COVID-19 pandemic wave 2.*
4	Jan – Mar	*Deferred due to on-going Covid-19 pandemic.*

- **Quarter 2 July – September 2020.** Repair of Neck of Femur surgery surveillance undertaken 01/07/2020 until 30/09/2020.

Findings

- 93 procedures were completed with 4 SSI's identified and reported to PHE. (1 superficial incisional, 1 organ/space infection, 2 deep incisional). These figures represent an overall SSI incidence of 4.3%.

- An outlier letter has been received from PHE, notifying UHNM that inpatient and readmission SSI risk is above the national 90th percentile in Repair of Neck of Femur category.

Actions

- Trauma and Orthopeadic Surgeons are undertaking a 'look-back' audit of all 'deep' neck of femur wound infections infections for the timeframe January 2020 – December 2020.

- A multidisciplinary team led by Trauma Consultant Surgeon /Trauma Lead for Infection Prevention, is supporting and CST facilitated review of the 'repair of neck of femur' patient pathway using the 'One Together' resources. Further information on 'One Together' can be accessed at: https://www.onetogether.org.uk/resources/

- This process is currently in progress and a further report will follow once the 'One Together Assessment Tool' review of this patient pathway is complete. This category of surveillance will be repeated at a future date yet to be determined.

PHE report - 'Surveillance of SSI in NHS hospitals in England (April 2019 – March 2020)' provides cumulative inpatient and readmission SSI incidence data by surgical category. This information is compiled from data submitted to PHE from NHS hospitals in England over a 5 year period (April 2015 to March 2020) and provides a national benchmark for comparison. Inpatient and readmission SSI incidence for surgical category Repair of Neck of Femur = 0.9%.

- Surveillance continues for this category until 30th September 2021.
  CST has worked with clinical teams to advise on the surveillance process and worked collaboratively to confirm any cases of SSI.

RSUH 2020-21				
Quarter	**Category**	**No. of ops**	**No. of SSI's**	**%**
1	N/A	N/A	N/A	N/A
2	N/A	N/A	N/A	N/A
3	Repair of Neck of Femur	93	4	4.3%
4	N/A	N/A	N/A	N/A

County Hospital 2020-21				
Quarter	**Category**	**No. of ops**	**No. of SSI's**	**%**
1	N/A	N/A	N/A	N/A
2	N/A	N/A	N/A	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

Trust wide – Qt3 2020-21

Category of Surgery	No of operations performed	No of SSI's	No. of SSI's as a % of total operations performed
Repair of Neck of Femur - Qtr 3	94*	4	4.3%**

*Figure represents the number of procedures and does not reflect the number of patients within this category.
**Cumulative inpatient and readmission SSI incidence (knee replacement), NHS Hospitals England - Jan 2016 to December 2020 = 1.1%

- The category for quarter **3** (Oct to Dec 2020) is Repair of Neck of Femur:

*Figure represents the number of procedures and does not reflect the number of patients within this category.
**Cumulative inpatient and readmission SSI incidence (knee replacement), NHS Hospitals England - Jan 2016 to December 2020 = 1.1%

The IPT work closely with specialities that report infections during the surveillance period. Investigations are carried out and reported through the Surgical Division and the Tissue Viability Group. Surgical Site Surveillance is a standing item on the IPCC agenda with a report presented by CST.

Getting it Right First Time (GIRFT)
UHNM participated in the Getting It Right First Time (GIRFT) SSI Survey 2019. This was a national programme designed to improve surgical and medical care by reducing unwarranted variations in the way services are delivered and by sharing best practice between hospitals. GIRFT aims to identify changes that will improve patient care and outcomes, as well as delivering efficiencies such as the reduction of unnecessary procedures and cost-savings.

3 GIRFT specialities (similar to those surveyed for GIRFT SSI Survey 2017), were chosen to be surveyed.

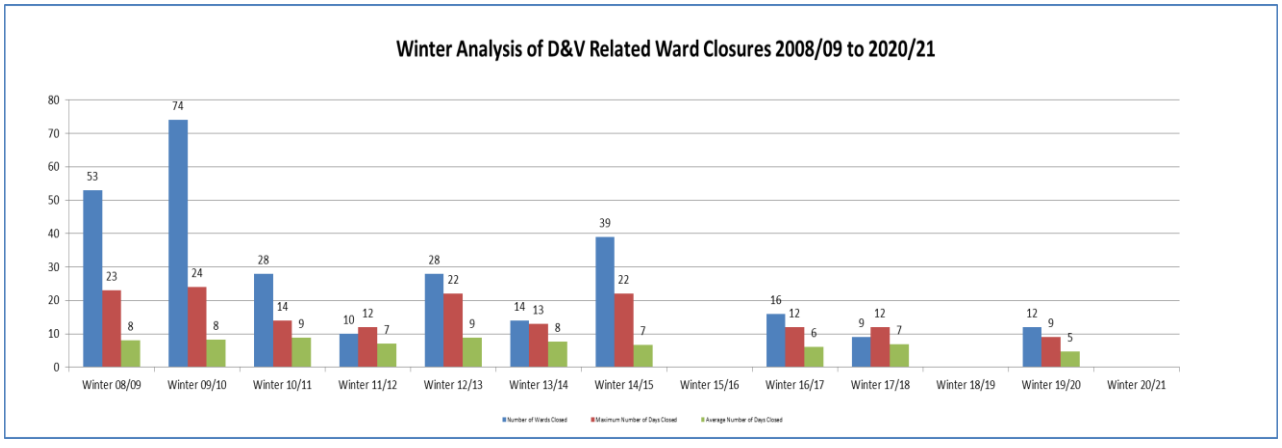
- **Breast Surgery:**
  1. Breast Implant – subdividing into Pre-pectoral (mesh), Sub-pectoral (mesh) and Dermal sling (without mesh);
  2. Level 2 mammoplasty - therapeutic or symmetrising;
  3. Procedures requiring a flap – local/ free/ pedicled.
- **General Surgery:**
  1. Emergency laparotomy;
  2. Emergency Appendectomy;
  3. Elective Large Bowel resections.
- **Spinal Surgery:**
  1. Posterior cervical spine decompression and instrumented fusion
  2. Lumbar spine single level instrumented posterior fusion (including interbody fusion)
  3. Lumbar spine single level discectomy or decompression (unilateral or bilateral)
  4. Posterior correction of adolescent idiopathic scoliosis

The 2019 survey encompassed a six month period from 1st May - 31st October 2019 and an update was presented to IPCC 03/2020. The GIRFT datapack has been received by the Trust - review of this data is currently postponed due to COVID-19 pressures.

Managing Outbreaks of Infection - Responses to Incidents and Outbreaks

The IPT are involved in the management of outbreaks, periods of increased incidence and incidents.

It was reported that there were very low levels of norovirus circulating in the community. There were no ward closures due to confirmed norovirus.



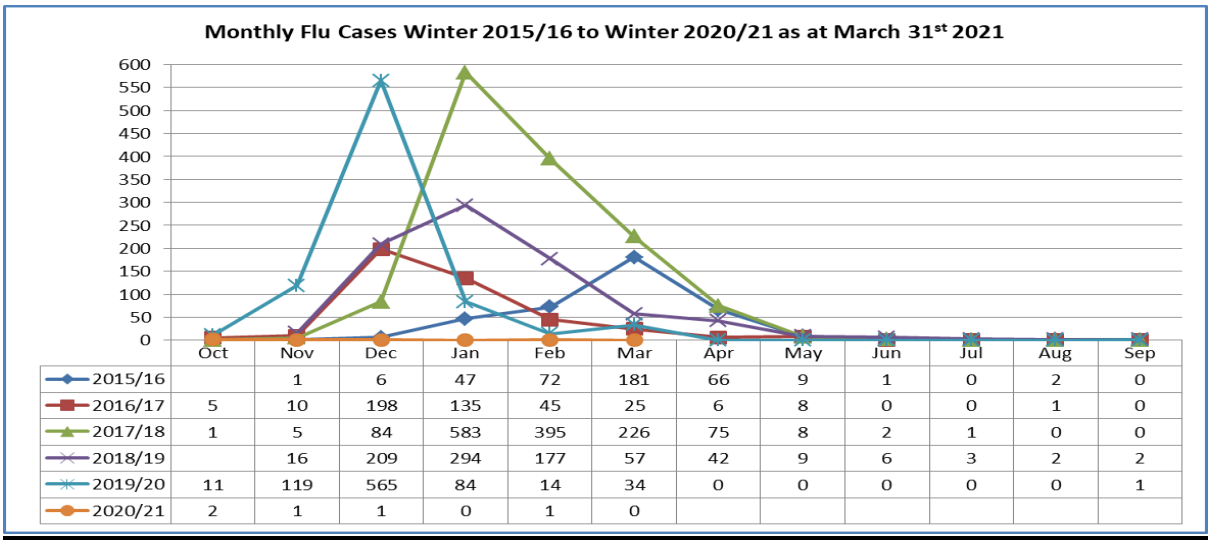
Seasonal Influenza

Australia and the Southern hemisphere saw very little influenza cases during their 2020 winter. The situation was closely monitored, and is again being monitored during the current months. PHE reported that this winter's influenza vaccine was a good match to circulating strains.

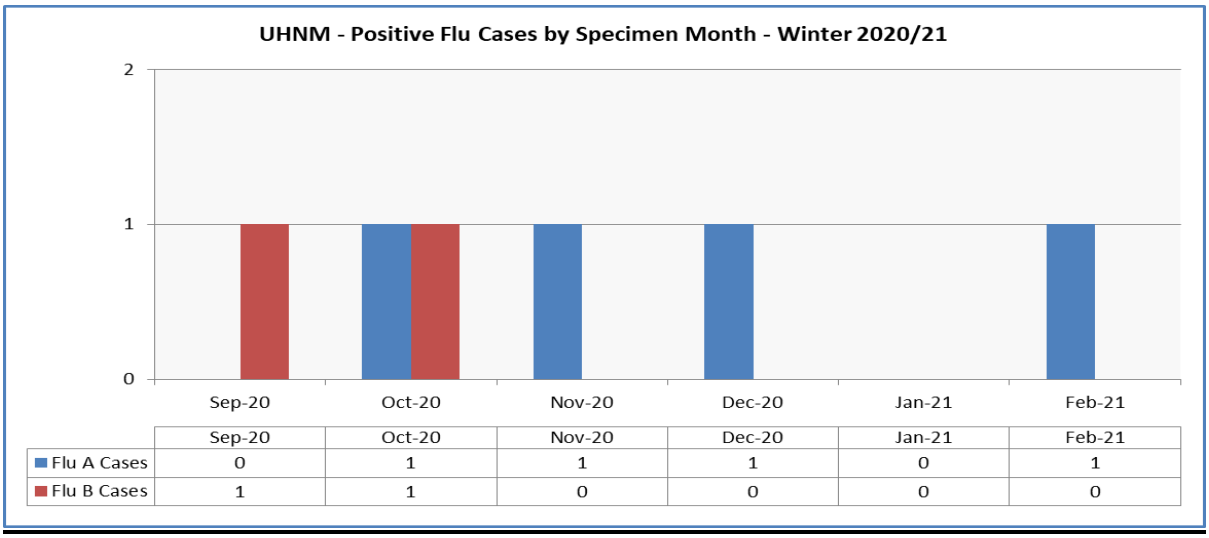
As will be seen from the graphs below UHNM have seen very few patients with confirmed influenza, mainly Influenza A.

For each case immediate control measures were instituted, following the latest PHE guidance, including the use of antivirals.

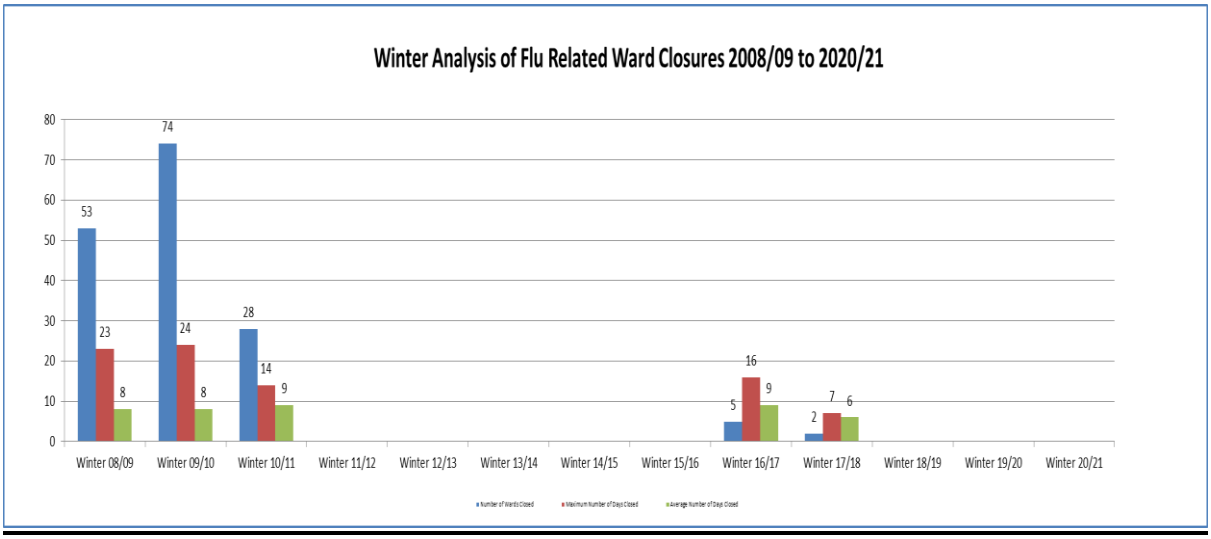
There were no ward closures due to influenza.

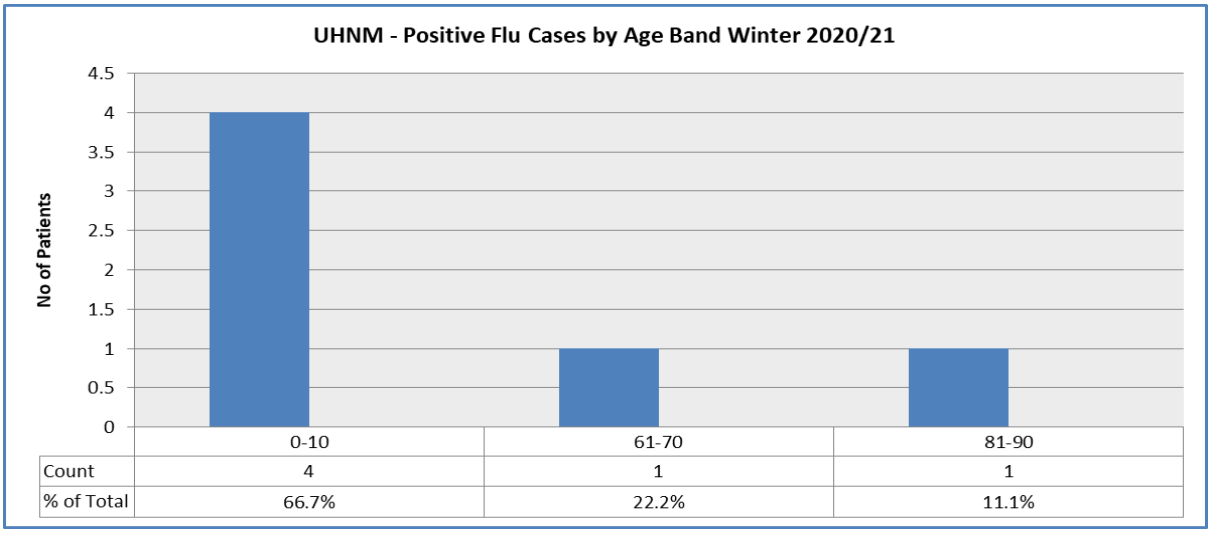


	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
2015/16		1	6	47	72	181	66	9	1	0	2	0
2016/17	5	10	198	135	45	25	6	8	0	0	1	0
2017/18	1	5	84	583	395	226	75	8	2	1	0	0
2018/19		16	209	294	177	57	42	9	6	3	2	2
2019/20	11	119	565	84	14	34	0	0	0	0	0	1
2020/21	2	1	1	0	1	0						



	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21
Flu A Cases	0	1	1	1	0	1
Flu B Cases	1	1	0	0	0	0





	0-10	61-70	81-90
Count	4	1	1
% of Total	66.7%	22.2%	11.1%

Compliance Criteria 6:

Systems to ensure that all care workers (including contractors and volunteers) are aware of the discharge of and discharge their responsibilities in the process of preventing and controlling infection.

At the UHNM infection prevention is included in all job descriptions**.** All clinical staff receive training and education in optimum infection prevention practices.

Occupational Health services are provided by Team Prevent.

Seasonal Staff Influenza Vaccination Campaign

Planning for the 2020-21 seasonal flu vaccination campaign is well established, covering both sites, Training for newly appointed vaccinators was held during September 2020. The campaign officially began on 1st October 2020 with a wealth of information/videos available to staff on the UHNM intranet as well as the locally based flu champions.

There are currently 100 vaccinators supported by 30 champions covering 58 clinical areas. Vaccination training was held online this year for all established vaccinators. This training is well supported by the Infectious Diseases Consultant, Resuscitation, Nursing Directorate and Pharmacy teams. These vaccinators and champions are well supported by our Lead Vaccinator from the IP team. PGDs/ written Instructions for the flu vaccine and adrenaline were updated, completed and circulated prior to the campaign start.
The plans for 20/21 also included an on- line booking system so that social distancing could be maintained during the campaign.

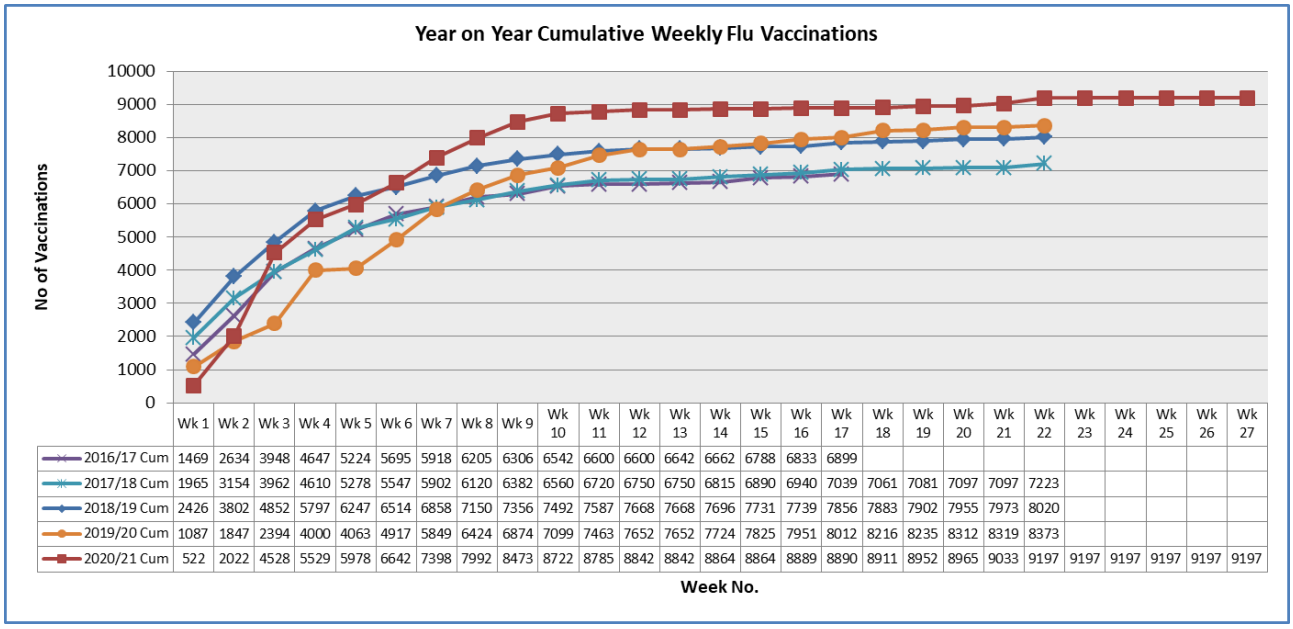
The Seasonal Influenza Vaccination Group continues to meet regularly throughout the year, utilising email communications and Microsoft Teams and is a sub-group of IPCC, with minutes presented to the IPCC. This Group reflects and debriefs on the previous campaign to ensure lessons are learnt as well as new initiatives introduced (from national forums and information sharing). The group includes representation from the IPT, Pharmacy, Nurse Education, Communications and Occupational Health, as well as working collaboratively with colleagues from the Public Health Team in the local Council to cover all UHNM locations.
The Occupational Health Department (Team Prevent) work very closely with the vaccinators so that there is a seamless inter-woven campaign.

The Communications Team are integral to the whole planning process and have a well-rehearsed plan to communicate important messages to staff, including myth busting. Previous videos are to be reused which staff can access, and include myth busting messages as well as staff and patients who have experienced the effects of influenza.

In addition to the vaccinators and champions within every clinical area, vaccination clinics and a roving service again operated. Discrete groups of staff had dedicated vaccination clinics organised within their area, for example Estates, Facilities, Pharmacy, HSDU and Pathology. UHNM Pot Luck donated several large tubs of sweets as an initiative to entice staff to be vaccinated.

Sodexo have been approached to kindly donate £5 vouchers for staff to have a weekly draw covering the first 10 weeks of the campaign, and additionally a £10 voucher to be drawn at the end of October, November and December.
The Fruit & Vegetable proprietors at the main entrance have been approached again this year to donate a hamper of fresh produce for the campaign start.

The campaign launched on 1st October 2020. There is a national CQUIN for staff seasonal flu vaccination during 2020-21. 9197 vaccinations were administered which is the highest number of staff ever vaccinated at UHNM.



	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	Wk 13	Wk 14	Wk 15	Wk 16	Wk 17	Wk 18	Wk 19	Wk 20	Wk 21	Wk 22	Wk 23	Wk 24	Wk 25	Wk 26	Wk 27
2016/17 Cum	1469	2634	3948	4647	5224	5695	5918	6205	6306	6542	6600	6600	6642	6662	6788	6833	6899										
2017/18 Cum	1965	3154	3962	4610	5278	5547	5902	6120	6382	6560	6720	6750	6750	6815	6890	6940	7039	7061	7081	7097	7097	7223					
2018/19 Cum	2426	3802	4852	5797	6247	6514	6858	7150	7356	7492	7587	7668	7668	7696	7731	7739	7856	7883	7902	7955	7973	8020					
2019/20 Cum	1087	1847	2394	4000	4063	4917	5849	6424	6874	7099	7463	7652	7652	7724	7825	7951	8012	8216	8235	8312	8319	8373					
2020/21 Cum	522	2022	4528	5529	5978	6642	7398	7992	8473	8722	8785	8842	8842	8864	8864	8889	8890	8911	8952	8965	9033	9197	9197	9197	9197	9197	9197

Compliance Criteria 7:

Provide or secure adequate isolation facilities.

Royal Stoke Hospital

Single Bed Rooms & En Suites

Trent Building

	No. of Single Rooms	No. of En Suites
Ward 120 Neurology	3	0
Ward 121 Diabetes & Endocrinology	3	0
Ward 122 General Medicine	3	0
Ward 123 FEAU	3	0
Ward 124 Renal unit	15	15
Ward 126 Respiratory	0	0
Ward 127 Acute Stroke Unit	0	0

Ward 126 & 127 has 4 pods around bed spaces

Lyme Building

	No. of Single Rooms	No. of En Suites
SSCU	2	0
Ward 100/101 DATAU	7	3
Ward 102/103 Emergency Surgery	7	4
Ward 104 SAU	5	2
Ward 105 SACU	3	1
Ward 106/107 Urology & Gynaecology	3	2
Ward 108/109 Surgical Elective Unit.	8	4
Ward 110	12	12

Vascular		
Ward 111 Specialised Surgery	12	12
Ward 112 Elective Orthopaedics	12	12
Ward 113 Respiratory	12	12

Maternity Centre

	No. of Single Rooms	No. of En Suites
Delivery Suite	16	16
Neonatal Unit	6	6
Ward 205	10	10
Ward 206	12	12
Midwifery Birthing Centre	11	11

Cancer Centre

	No. of Single Rooms	No. of En Suites
Oncology Day Unit	5	5
Haematology & Oncology Inpatients	23	23

West Building

	No. of Single Rooms	No. of En Suites
Ward 75 Winter Pressures/ Vaccination	4	4
Ward 78/79 Older Adults Unit	8	2
Ward 80/81 Elderly Care	4	0
Ward 76a Elderly Care	3	1
Ward 76b Elderly Care	3	1

Ward 76b has 4 pods around bed spaces

Main Building

	No. of Single Rooms	No. of En Suites
CDU	4	3
215 Children's Intensive Care Unit	4	0
216A Children's Oncology	4	4
216 Children's Medicine	9	9
217 Children's Surgery	9	9
217B Oncology Day Care	5	5
218 Cardiology	11	11
CCU Cardiology	3	0
220 Cardiology	13	13
221 Cardiology	11	10
222 Respiratory NIV	11	11
223 Cardio Thoracic Surgery	16	16
225 Specialised #NOF	16	15
226 Trauma Orthopaedics	11	10
227 ARTU	11	10
228 Neuro Surgery	15	15
230 Gastroenterology	16	15
231 AMU	11	10

232 AMU	11	10
233 SSU / AMRAU	17	16

Isolation Rooms	
PICU	2 single rooms (3&4)with positive pressure gowning lobby
Emergency Department	1 treatment room (2) with balanced pressure gowning lobby
Infectious diseases (Ward 117)	4 negative pressure isolation rooms with lobbies

Side rooms within Critical Care	
Standard Side Room (No gowning lobby, neutral air pressure)	
Pod 1	Side room1
Pod 2	Side room 9
Pod 3	Side room 24
Pod 5	Side room 33
Pod 6	Side room 4

Side rooms within Critical Care	
Isolation Side room (Gowning lobby, side room neutral pressure)	
Pod 1	Side room 8
Pod 2	Side room 16
Pod 3	Side room 17

Side rooms within Critical Care	
Isolation Side room (side room negative pressure)	
Pod 2	Side room15
Pod 4	Side room 32 (has lobby) and side room 25
Pod 6	Side room 3 (has lobby)

Side rooms within Critical Care	
Protective isolation room (with gowning lobby, side room positively pressured)	
Pod 5	Side room 34

County Hospital

Ward	No. of Single Rooms	Toilet	Shower/bath
Elective Trauma and Orthopaedic Ward	13	13	13
Ward 12 Respiratory	12	12	12
Ward 14 Diabetes & Endocrinology	12	12	12
Ward 15 Elderly Care	12	12	12
Ward 7 Empty Winter Pressures	4	3	0
AAU	3	0	0
AMU	3	3	0
Critical Care Unit	0	0	0
A&E	6	0	0
A&E Ambulance corridor	3	0	0
A&E Ambulatory	4	0	0
Chemotherapy Unit	6	3	0
Ward 1 (ward 7) General Medicine	4	3	0
Medical Receiving Unit	3	0	0
Ward 8 Choices	3	3	1

Compliance Criteria 8:

Secure adequate access to laboratory support as appropriate

Laboratory services for UHNM are located in the purpose built Pathology Laboratory on-site at RSUH. The Laboratory is United Kingdom Accreditation Service (UKAS) accredited.

The Infection Prevention Nurses work closely with the Biomedical Scientists.

Compliance Criteria 9:

Have and adhere to policies, designed for the individual's care and provider organisations that help to prevent and control infections

An Infection Prevention Questions and Answers Manual, with an overarching policy is in place at UHNM this significantly enhances the quick location of key infection prevention guidance by our front line staff.

The overarching policy is written in line with the Trust Governance policy which outlines requirements for responsibility, audit and monitoring of policies to provide assurance that policies are being adhered to. Both policy and manual are available for staff to view on the Trust intranet.

Clinical Governance has produced a directory of policies alerting when policies are due for update, policies are also updated prior to review date if guidance is updated.

The COVID 19 Trust guidance was regularly updated in line with Public Health England COVID 19 guidance.

Compliance Criteria 10:

Providers have a system in place to manage the occupational health needs of staff in relation to infection.

All job descriptions include infection prevention responsibility and this message is reiterated during mandatory training. The IPT participate in mandatory updates for all staff groups (clinical and non-clinical). The IPT regularly meet with representatives of the Occupational Health Service to ensure compliance with Criteria 10.

Staff Training
This has been documented earlier in this report.

IPN/Team Development

Numerous PHE COVID 19 webinars were held throughout the year which IP Team attended via Teams/Zoom.

Team members attended via Zoom the Knowlex Infection Prevention Committee.

Various water safety and mask fit and decontamination webinars were attended throughout the year.

All new Nursing staff to the Infection Prevention Team undergoes a two week supernumerary induction programme on Infection Prevention, as well as being issued with a personal copy of a relevant textbook.

Conclusion

Infection prevention is a key marker of patient safety within UHNM, as it encompasses a broad range of factors, from the state of the environment through to the effect of antibiotic use on the selection of organisms such as Clostridium *difficile,* MRSA and CPE. This requires the involvement of all grades of staff, on an on-going basis, and the IPT are central to this.

At UHNM we acknowledge that the Trust has a number of challenges:

- Continuing threat of COVID-19 and other respiratory viruses.
- Continuing and developing FFP3 mask resiliency.
- Reduction of Gram negative blood stream infections by 25% by 2021, 50% by 2024
- Continuing threat from CPE.
- Reducing the incidence of CDI.
- Reducing the incidence of MRSA bacteraemia.
- Sustainability of Infection Prevention practices across the Trust.
- Monitoring of pharmacy/prescribing data.
- Monitoring of Surgical Site infections.
- National/international threats, e.g. multi-resistant Gram Negative Bacilli; emerging respiratory viruses and working closely with the Emergency Planning Team.

Appendix 1 Annual Programme of Works 2021-2022

Infection Prevention Programme of Works for the period April 2021 March 2022
The Trusts aim is to care for patients in a safe environment protecting them from harm with a zero tolerance to avoidable hospital attributable infections. The document sets out the Trust's objective and priorities risk of infection for the period 1 April 2021 – 31 March 2022. The intentions detailed below aim to sustain and strengthen the Trust's position in achieving compliance with The Health and Social Care Act 2008: Code of Practice on the Prevention and Control of Infection and Related Guidance (updated 2015) and other key national documents. The programme details the essential components of the infection prevention service including- • Surveillance • Policy development and review • Outbreak prevention and management • Quality improvement and audit • Education and training • Specialist advice including promoting compliance with regulation, legislation, guidance and evidence based practice. The following abbreviations are used throughout the document: DIPC – Director of Infection Prevention and Control IPN – Infection Prevention Nurse IPT – Infection Prevention Team ICD – Infection Control Doctor CCG – Clinical Commissioning Group NHSI – National Health Service Improvement PLACE – Patient Led Assessment of the Care Environment RON – Resistant Micro-organism Nurse

Objective	Actions	Person(s) Responsible	Time Scale & Priority
Criteria 1 Systems to manage and monitor the prevention and control of infection	**Assurance Framework**		
	Key committees including Quality and Safety Committee and the Trust Board will receive reports and presentations, monthly as a minimum for the former and quarterly for the latter from the DIPC.	DIPC	Quarters 1-4
	The DIPC will ensure the Trust Board agree and approve the:		
	• Annual Programme of Works	DIPC	Quarter 1
	• Annual report	DIPC	Quarter 1
	• Policy, procedure and guidance documents	DIPC	Quarters 1-4
	• Cleanliness and Patient Led Assessment of the Care Environment (PLACE) scores	Support Services	Annually
	The DIPC will ensure that the Trust Board is made aware of:		
	• Emerging issues with the potential to impact upon patient safety and the delivery of clinical services (COVID-19)	DIPC	Quarter 1-4
	• Unforeseen issues impacting upon progress of the annual programme	Deputy DIPC	Bi monthly
	• Ensure the progress of the annual programme is monitored by the IPT and any identified or emerging issues affecting the programme are reported to members of the group and where necessary escalated to the Trust Board.	DIPC	Quarter 1-4

Objective	Actions	Person(s) Responsible	Time Scale & Priority
	• Ensure that the Infection Prevention Control Committee meet bi-monthly and is chaired by the DIPC.	Deputy DIPC	Bi -monthly
	IPT to attend Health Economy Antimicrobial Meetings	Deputy DIPC	Quarterly
	IP Deputy DIPC any Health Economy meeting organised by the CCG	Deputy DIPC	As required
	Infection Prevention Nurse to attend Trust Antimicrobial Stewardship Group	Lead Nurse Infection Prevention	Bi Monthly
	Performance Management Ensure that the Quality, Safety and Compliance Team receive appropriate information to support on-going registration with the Care Quality Commission	Governance	As required
	Report on progress against the HCAI assurance framework. strategy including emergency and elective screening compliance	Deputy DIPC	Monthly
	Quarterly report and IP BAF to Quality Assurance Committee and Trust Board monthly	Deputy DIPC	Quarterly/Monthly
	Ensure that monthly data summaries, incidents and outbreaks are included in the Quality and Safety reports.	Deputy DIPC	Monthly
	Deputy DIPC meeting with CCG to review Clostridium *difficile* root cause analysis and agree unavoidability/avoidability	Deputy DIPC	Quarterly
	Update any Infection Prevention risks on risk register	Deputy DIPC	Bi Monthly

Objective	Actions	Person(s) Responsible	Time Scale & Priority
	Make a suitable and sufficient assessment of the risks of infection and take actions to minimise the risk	IPT / ICD/Consultant Microbiologist	Daily
	Using ICNet, review laboratory reports during periods of duty and provide specialist advice to clinical teams on the management of individual patients.	IPT	Daily
	Undertake alert organisms surveillance report to IPCC	ICD and Senior Data Analyst	As required but at least bi monthly
	Outbreaks		
	Respond to and advise on the management of outbreaks of infection	IPT	Within 24 hours
	Where required report outbreaks of infection as a SI through Trust reporting systems. Inform the DIPC, senior management, Heads of Services, Performance Management and key individuals of outbreaks	IPT	No later than 48 hours after incident or lapse in care is identified
	Initiate the Root Cause Analysis investigation process	IPT	Within 24 hours
	Prepare outbreak summary reports and submit to IPCC, Quality Governance Committee and the Board.	IPT	At next IPCC
	Root cause analysis performed for hospital attributable clostridium *difficile* cases • Learning and actions owned and received at divisional IP meetings and summary to IPCC	Associate Chief Nurse/Matron/Ward Sister/Ward Charge Nurse for the Division/ IPT	As required

Objective	Actions	Person(s) Responsible	Time Scale & Priority
	Post infection review for all MRSA bacteraemia • Learning and actions owned and received at divisional meetings and summary to IPCC	Associate Chief Nurse/Matron/Ward Sister/Ward Charge Nurse for the Division/ IPT	As required
	Facilitate Screening of alert organisms e.g. MRSA, Multi drug resistant organisms admitted or transferred to UHNM in accordance with National guidance and evidence based practice	IPT/Senior Data Analysis	Quarter 1-4
	Participate in multi- disciplinary review of Clostridium difficile toxin positive patients	Infection Prevention Nurse/ Microbiologist/Dietician/ Pharmacist/Gastroenterologist/ Surgeon	Weekly Quarterly
	Maintain and review Clostridium difficile action plan and Submit to Quality and Safety Oversight Group	Deputy DIPC	Bi -Monthly
	Monthly Clostridium difficile 30 day all-cause mortality report	Deputy DIPC	Bi- Monthly to IPCC
	Surgical Site Surveillance Infection Surveillance programme in place. Feedback to Directorate Meetings	Clinical Surveillance Team IP	Quarters 1-4
	Review and update Gram negative action plan and submit Quality and Safety Oversight Group bi monthly	Clinical Surveillance Team IP	Bi-Monthly
	IPT to attend and provide specialist advice: • Infection Prevention Divisional meetings	IPN	Bi -Monthly
	• Vaccination planning group	Deputy DIPC	Three times per year
	• Sepsis planning meetings Strategic and antimicrobial group	Deputy DIPC	Bi monthly

Objective	Actions	Person(s) Responsible	Time Scale & Priority
	• Covid-19 Pandemic meeting/Groups	Deputy DIPC/Lead	Daily/Weekly
	• Trust Antimicrobial Group	Lead	Bi -Monthly
	• Quality and Safety Oversight Group	Deputy DIPC/ Lead	Monthly
	• Quality Governance Committee	Deputy DIPC/ Lead	Quarterly
	• CQRM	Deputy DIPC	Monthly report
	• Health & Safety Committee	Lead	Bi- Monthly
	• CCG Infection Prevention Group	Deputy DIPC /Lead	As Required
	• Ventilation group	IP Decontamination Lead	Bi- annual
	• Water Safety Group	Deputy DIPC	Quarterly
	• Health Economy Antimicrobial Group	Deputy DIPC	Quarterly
	• IP Divisional Meetings	IPT	Monthly
	• Mortality review meetings	IP Lead Nurse	Monthly
	• Decontamination	IP Decontamination Lead	Monthly
	• Clostridium *difficile* Task and Finish Group	IP Lead	Monthly

Objective	Actions	Person(s) Responsible	Time Scale & Priority
Criteria 2 Provide and maintain a clean and appropriate environment in managed premises that facilities the prevention and control of infections	IPT to attend and provide specialist advice:		
	• Multi- Disciplinary Environmental Strategy Group	IPT	Monthly
	• Water Safety Group	Deputy DIPC/IP Decontamination	Quarterly
	• Environmental Health Food Hygiene Inspections	IPT	Annually
	• Refurbishment and Building Meetings	IPT/Service Development Team	As required
	• Infection Prevention Cleaning Services (Soft FM)	IPT/Service Development Team	Monthly
	• Decontamination Group	IPT/Service Development Team	Monthly
	• Clinical Equipment Product Evaluation Group (CEPEG)	IPT/Service Development Team	Monthly

Objective	Actions	Person(s) Responsible	Time Scale & Priority
	Air Scrubber exploration	Service Development Team	Quarter 1-2
	Re refresh Pooh help line	IP C.*difficile* Nurse	Quarter 2
	Support biofilm research project undertaken by PHD Student Southampton University	Service Development Team	Quarters1-4
	Quality Improvement Audits		
	IPN to conduct period of increased incidence (PII) audits when PII is identified. Feedback to ward, Matron and Divisions.	IPN	As required
	IPN to conduct Clostridium *difficile* audit following each hospital acquired case	IPN	As required
	IPN's will undertake a programme of unannounced audits in clinical areas, including hand hygiene audits/ATP/ COVID spot checks	IPN/Hand Hygiene Trainer	As required
	Audit tools and programme in place for Divisions/areas to monitor environment. IPN's to support service leads, Matron and Ward Sisters/Charge Nurse	Associate Chief Nurses/Matrons/ Ward Sister/Charge Nurse	Weekly/Monthly/ Quarterly
	Cleaning for Credits (C4C) audit programme in place - feedback bi -monthly at IPCC	Facilities Manager	Bi Monthly

Objective	Actions	Person(s) Responsible	Time Scale & Priority
	Prompt to protect audits	IP Team	Weekly
	IPCC to receive summary progress and action plans for Divisions	Associate Chief Nurses/Matron	Bi Monthly
	Building works and refurbishments IPT to advise on building and refurbishments.	IPT/Service Development Team	As Required
	IP Team to advise on new cleaning products and deep clean programmes	Deputy DIPC/IPT	As Required
Criteria 3 Ensure appropriate antibiotic use to optimise patient outcomes and to reduce the risk of adverse event and antimicrobial resistance	Work with partner organisations to ensure that the Trust has systems and procedures which minimise the risk from emerging and resistant organisms	Advance Specialist Pharmacist Antimicrobials/Microbiologist/ ICD DIPC	Quarters 1-4
	Representation at Local Health Economy Antimicrobial Group Meeting	Deputy DIPC/Microbiologist	Quarterly
	Antimicrobial pharmacist to report antibiotic audits to IPCC	Advance Specialist Pharmacist Antimicrobials	Bi monthly

Objective	Actions	Person(s) Responsible	Time Scale & Priority
		Microbiologist	Quarters 1-4
	The IP and Antimicrobial Team work closely together re CQUIN However, National AMR CQUIN currently suspended	Microbiologist/Advanced Specialist Pharmacist Antimicrobials Deputy DIPC/IP Team	Quarters 1-4
	Access to Microbiologist to advise on appropriate choice of antimicrobial therapy		Quarters 1-4
	Access to microbiology diagnosis, susceptibility testing and reporting of results	ICD/Microbiology Manager	Quarters 1-4
	Sepsis CQUIN part of Trust contract	Deputy DIPC/ Sepsis IP Team	Quarters 1-4
	Strengthening of Sepsis champions and sepsis screening	Deputy DIPC/ Sepsis IP Team	Quarters 1-4
	Sepsis educational material	Deputy DIPC/Sepsis IP Team	Quarters 1-4

Objective	Actions	Person(s) Responsible	Time Scale & Priority
Criteria 4 Provide suitable accurate information on infections to service users, their visitors and any person concerned with providing further support or nursing/medical care in a timely fashion.	DIPC to liaise with Communications Team to deliver public messages in times of outbreaks Patient information leaflets available for the public. IPT to actively participate in promotional activities across the Trust, raising awareness of good practice e.g. visitor's stands / Infection Prevention Awareness Week/ Hand Hygiene World Health Organisation Day Review public internet page All Clostridium *difficile* given a "green alert card" to be presented when receiving future healthcare Hand hygiene education for patients Explore if hand hygiene key message can be added to standard outpatient letter	DIPC IPT/Service Development Team IPT Service Development Team/IPT Hand hygiene Technician Service Development Team	As required Quarters 1-4 Quarter 1-4 As required Quarters 1- 4 Quarter 3-4
Criteria 5 Ensure prompt identification of people who have or are at risk of developing an infection so that they receive timely and appropriate treatment to reduce the risk of transmitting infection to other people	Alert tag system place at Royal Stoke to allow staff to check for current and previous alert organisms to enable proactive approach to IP. Norovirus/winter signage displayed throughout the Trust COVID -19 Silver/Bronze within the IP Team	IPT IPT Deputy DIPC/ Lead Nurse	As required Quarter 3-4 Quarter 1-4

Objective	Actions	Person(s) Responsible	Time Scale & Priority
Criteria 6 Ensure that all staff and those employed to provide care in all settings are fully involved in the process of preventing and controlling infection.	**Education and Training** Liaise with the Education and Learning Team, Service Leads and Business Managers to ensure all staff are suitably educated in the prevention and control of infection.		Time scale in accordance with documented programmes
	IPT to attend • Teaching and Education	IPT	Quarters 1-4
	• Corporate induction	IPT	Quarters 1-4
	• Mandatory training days	IPT	Quarters 1-4
	• Scheduled programme of updates	IPT	Quarters 1-4
	• Infection Prevention Link Practitioners study days	IPT	Quarters 1-4
	Planned programme for Student Nurses to shadow the IPT	IPT	Quarters 1-4
	Contribution for the continuous personal development programme for medical and other staff.	IPT/ICD	Quarters 1-4
	Provide cascade training for volunteers/porters/catering assistants/domestics about the importance of complying with good practice.	IPT	Quarters 1-4
	Use variety of educational approaches to engage staff e.g. ATP monitoring, PowerPoint, shadowing, on line learning	IPT	Quarters 1-4
	Hand Hygiene and Mask Fit Testing	IPT	Quarters 1-4

Objective	Actions	Person(s) Responsible	Time Scale & Priority
Criteria 7 Provide and secure adequate isolation facilities	To advise/make recommendations on isolation facilities during refurbishment programmes Inform DIPC where there is lack of isolation rooms of when requirements change e.g. threat of alert organism	IPT Deputy DIPC	As required As required
Criteria 8 Secure adequate access to laboratory support as appropriate	Ensure CPA accreditation of laboratories is current Daily laboratory bench round with “on call” microbiologist	ICD/Lab Manager IPT	Annually Daily
Criteria 9 Have and adhere to policies, designed for the individuals care and provider organisation that will help to prevent and control infections	Amend polices or guidance and any related documents in response to legislation, regulations and evidence based practice. Ensure that existing policies with a review date falling within this period are revised and comply with legislation, regulations, current guidance and evidence based practice: Infection prevention Question and Answer manual in place	IPT Service Development Team	As required Quarter 3-4

Objective	Actions	Person(s) Responsible	Time Scale & Priority
Criteria 10 Providers have a system in place to manage the occupational health needs of staff in relation to infection	Liaise with and support the Occupational Health Department in protecting healthcare workers from infections through: The review and follow up of inoculation and/or splash injury Work with partner organisation to ensure that the Trust has systems and procedure in place which reduces the risk from emerging and resistant organisms. Lead the planning and delivery of the staff influenza programme. Team Prevent to report to IPCC	Team Prevent ICD IPT Health and Safety Department ICD IPT Deputy DIPC Team Prevent	Quarters 1-4 Quarter 3 Quarters 1-4 Quarters 1-4 Quarters 1-4

References

Department of Health: The Health and Social Care Act 2008: Code of Practice on the prevention and control of infections and related guidance.

https://www.gov.uk/government/publications/the-health-and-social-care-act-2008-code-of-practice-on-the-prevention-and-control-of-infections-and-related-guidance

Infection Prevention Society Audit tools. http://www.ips.uk.net/professional-practice/quality-improvement-tools/quality-improvement-tools/