

# Infection Prevention and Control Annual Report 2021/2022

DOCUMENT DETAILS		
Author:	Paul Bolton	
Job title:	Head of Infection Prevention and Control	
Directorate:	Nursing	
Version no:	1.0	
Target audience:	Board of Directors	
Approving committee / group:	Infection Prevention and Control	
Date:		

#### 1. Executive Summary

- 1.1. This report will be the second Infection Prevention and Control annual report for University Hospitals Dorset.
- 1.2. The Trust formed in October 2020; the previous annual report focussed on the learning from that date.
- 1.3. University Hospitals Dorset consists of 6 sites providing inpatient and outpatient care plus a separate sterile services department. This is spread within the boundaries of Bournemouth, Christchurch and Poole local authority area.
- 1.4. The Bournemouth site consists of 606 beds, around 87% of admissions to the Trust are non-elective.
- 1.5. The Christchurch site is predominantly outpatients' departments with the Macmillan unit providing hospice care.
- 1.6. The Poole site consists of 601 beds, around 91% of admissions to this site are nonelective. On the site is Forest Holme, a hospice and St. Marys. St Marys includes care facilities for post and ante natal care as well as NICU.
- 1.7. The Trust also now includes an Outpatient Service contained within the premises of Beales within the Dolphin Shopping Centre.
- 1.8. Across site, the services are delivered through the structures of 3 care groups each of which have services and teams based on both sites.
- 1.9. During 2021/22 the Trust experienced the impact of subsequent waves of the COVID-19 Pandemic. A separate report will be written covering the impact and lessons identified from the healthcare acquired cases identified within the Trust and subsequent outbreaks.
- 1.10. During 2021/22 the Trust maintained systems and processes to direct the delivery of the 10 standards outlined in The Health and Social Care Act 2008: Code of Practice on the prevention and control of infections. However, the pandemic, ongoing extreme pressure on operational flow and higher than average acuity have all had an impact on teams across the Trust to meet these standards consistently. It is the aim of the IPC Team to understand this greater as we move into 2022/23 and help support teams to make this more consistent.
- 1.11. The Director Infection Prevention and Control (DIPC), Department of Medical Microbiology and the Infection Prevention & Control Team are responsible for the leadership of the investigation, surveillance, prevention and control of infection in patients, healthcare workers and visitors to the Trust.
- 1.12. There is also a responsibility to work closely with Dorset Clinical Commissioning Group, Infection Prevention and Control colleagues in others healthcare providers,

Public Health England (changed now to UK Health Security Agency) and the Local Authority Public Health Teams.

- 1.13. There has been a nationally observed increase in cases of *Clostridioides difficile* as we have moved further through the pandemic. It is too soon to state reasons behind this. A South West Collaborative group are looking at possible sources for these cases so that we can implement action plans and care bundles to reduce incidence, UHD are part of this collaborative.
- 1.14. *MRSA* bacteraemia case numbers have continued to remain stable with 4 cases identified across UHD. However, the incidence of *MSSA* has increased within UHD.
- 1.15. Cases of *pseudomonas, Klebsiella and e.coli* bacteraemia have remained static or reduced within UHD.
- 1.16. The Estates team continue with an active programme to manage water quality in the Trust including reducing the risk from Legionella and Pseudomonas. Challenges with standards of environmental cleaning have been robustly managed and new systems introduced to improve the standards. Considerable building work continued through this time period which has been a challenge to manage safely with COVID-19.
- 1.17. Performance on anti-microbial stewardship has continued to be effective. A separate report to the Infection Prevention and Control Group covers this.

#### 2.0 INTRODUCTION

- 2.1 This annual report reviews the activity undertaken in the Trust to monitor, prevent and control micro-organisms in all hospital sites from April 2021 to the end of March 2022.
- 2.2 The Health and Social Care Act 2008: Code of Practice on the prevention and control of infections provides guides how Trusts should interpret and meet the Care Quality Commission (CQC) registration requirements on cleanliness and infection prevention and control.
- 2.3 The CQC takes the Code and its 10 compliance criteria into account when assessing the Trust for compliance with infection prevention and control requirements.
- 2.4 This report is organised to reflect the criteria detailed in the Code of Practice (Table One).

Number	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.
2	Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections.
3	Ensure appropriate antibiotic use to optimise patient outcomes and to reduce the risk of adverse events and antimicrobial resistance.
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.
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.
6	Systems to ensure that all care workers (including contractors and volunteers) are aware of and discharge their responsibilities in the process of preventing and controlling infection.
7	Provide or secure adequate isolation facilities.
8	Secure adequate access to laboratory support.
9	Have and adhere to policies designed for the individual's care and provider organisations that will help to prevent and control infections.
10	Providers have a system in place to manage the occupational health needs of staff in relation to infection.

Table 1 Health and Social Care Act 2008.Code of Practice Compliance Criteria

## 3.0 SYSTEMS TO MANAGE AND MONITOR THE PREVENTION AND CONTROL OF INFECTION

#### 3.1 Infection Prevention and Control Team (IPCT)

The Trust has a dedicated IPCT working across both sites. The team went through several changes during 2021 to 2022, at the time of writing the team consisted of;

Role	Band	Number in Post
Head of IPC	8B	1
Lead IPC CNS	7	2
Associate IPC CNSs	6	3
Associate IPC Practitioner	6	1
Nursing Associate	4	1
Assistant Practitioner	4	1
Fit Testing Co-ordinator	4	1
Administration Support		2

The role of Director of Infection Prevention and Control (DIPC) is undertaken by the Chief Nursing Officer. The Deputy Chief Nursing Officer and Deputy DIPC retains line management responsibility for the IPC team.

The IPC Team meet formally with the Head of IPC each week and review current cases under investigation, surveillance trends as well as reports from the various group meetings the team attend. Daily there is ongoing discussion of new clinical cases and work planning involving the Consultant Microbiologists. During this year the Microbiology department has supported the IPC Team with the equivalent of 1.0 PA for the Infection Control Doctor (ICD) post, this is in addition to the daily support for follow up of cases by the Microbiology Team. The IPC Team and the Microbiology Team are working together to increase the available time for the ICD noting the national shortage of Consultant Microbiologists.

The microbiology service remains heavily dependent on locum posts. Work is ongoing to recruit replacements. The increase in workload on the existing microbiology team has reduced their ability to attend some internal and external meetings.

The IPCT is well integrated into existing Trust governance structures with representation at a number of key groups as shown in table two.

Chief Nursing	Deputy Chief	Head of Infection	Infection Control	Infection Control
Officer	Nursing Officer /	Prevention and	Practitioners	Doctor/ Consultant
	Deputy DIPC	Control		Medical
				Microbiologist
Infection Prevention	Infection Prevention	Infection Prevention	Infection Prevention	Infection
and Control Group	and Control Group	and Control Group	and Control Group	Prevention and
				Control Group
Quality Committee	Quality Committee	Quality Committee		
Outbreak Control	Outbreak Control	Outbreak Control	Outbreak Control	Outbreak Control
Meeting	Meeting	Meeting	Meeting	Meeting
Trust Board	Trust Board	Trust Board		
Trust Management	TMG			
Group				
Senior Nurse and	Senior Nurse and	Senior Nurse and		
AHP Group	AHP Group	AHP Group		
IPC Cell	IPC Cell	IPC Cell	IPC Cell	IPC Cell
	Dorset IPC ICS	Dorset IPC ICS	Dorset IPC ICS	Dorset IPC ICS
	SW Regional IPC	SW Regional IPC	SW Regional IPC Cell	SW Regional IPC
	Cell	Cell		Cell
		Cleaning & contract	Cleaning and contract	
		review meeting/ Risk	review meeting/ Risk	
		and cleaning meeting	and cleaning meeting	
Post infection review	Post infection review	Post infection Review	Post Infection Review	Post Infection
				Review
Trust board	Trust board (As	Trust board (As		
	requested)	requested)		
		Decontamination	Decontamination	Decontamination
		Group	Group	Group
			Medical Device Group	
			Water Safety Group	
			Health and Safety	
			Group	
			Waste Management	
			Group	
			C.Diff Board Round	C.Diff Board
				Round
		Ventilation Group	Ventilation Group	Ventilation Group
	Fit Test Group		Fit Test Group	
			Care Group IC	
			meetings	

Table 2 List of Trust and external meetings

#### 3.2 Infection Control Group

The UHD Infection Control Group meets quarterly and is chaired by the DIPC. The group comprises representation from the IPCT, Care Group Directors of Nursing, Heads of Nursing and Professions, Care Group Matrons and Consultants, Estates team, Pharmacy, Occupational Health and Decontamination Services. The group has an open invite to the IPC Leads within West Hampshire CCG and Dorset CCG. The minutes of the group are submitted to the Quality Committee. There is a direct reporting line to the Trust Board through the Chief Nursing Officer.

The Group receives reports from Risk, Cleaning Group, Domestic Contract Review Meeting, Water Quality Group, the Decontamination Group, Ventilation Group and IPC Cell.

The Care Group Directors of Nursing provide a summary report of compliance with the key performance indicators and learning from post infection reviews, outbreaks, clusters, audit findings and cases of note from each of their respective Care Groups (Medical, Specialities and Surgical)

The IPC Team provide a comprehensive report on current Trust performance against national trends and action plans.

The Infection Control Group establishes an annual work plan to direct activity in meeting the local and national priorities for reducing healthcare associated infection. The plan is reviewed at the Group. Attendance at the Group demonstrates good nursing and estates representation with lower attendance amongst medical staff. The group would also benefit from wider AHP attendance.

#### 3.3 Surveillance of Microorganisms and Infection

The ongoing surveillance of microorganisms is a critical part of the Trust's activity. In addition to the monitoring of in-patients, the screening of patients on admission to hospital and liaison with other health-care providers is critical for early identification of organisms and instigation of appropriate control measures.

The IPC Team are now using version 7 of ICNET. This was tested and accepted within the Trust in Quarter Four of 2021. The team have supported the user acceptance testing of the ICNET instance within Dorset Healthcare University Foundation Trust with the hope that by Quarter Two 2022 there will be a Dorset wide ICNET system. This will enable teams and practitioners the ability to share clinical information and IPC decisions on patients as they move from Secondary care to the Community and back again. This software provides real-time surveillance of new microorganisms identified by the laboratory and is used by the IPC Team to keep a record of all clinical contact and advice provided for patients and staff. The team spent a considerable amount of energy and time changing several different parameters within ICNET to support the change in information fed from laboratories into ICNET with the introduction of WINPATH and have sought confirmation that any further downstream system changes include consultation with the system users to prevent the potential patient harm.

The system supports the provision of the weekly, monthly and quarterly reports across the Trust. The Trust complies with mandatory reporting requirements set by Public Health England with respect to certain key microorganisms as discussed over the next few pages. In 2022/2023 the Team will test new functions of the system to enable electronic reporting directly to the UKHSA Data Capture System and Surgical Site Surveillance systems replacing the current paper-based forms.

#### 3.4 Clostridioides difficile infection (CDI)

*Clostridioides difficile* is a type of bacterium found in the gut that can cause diarrhoea in certain circumstances. There is a wide spectrum of symptoms associated with the bacterium ranging from mild diarrhoea to severe colitis. It can be found in healthy people and cause no symptoms up to 3% adults and 66% of babies.

NHS Trusts are required to perform two tests for *C.difficile*. Testing identifies presence of *C.difficile* of a strain capable of creating toxins and also whether toxin production is present. This provides two results. Those included in Trust trajectories of cases are those where toxin is present. PCR+ve cases, where a toxigenic strain is present in the absence of toxin production are not included in table three. Patients with PCR+ve *C.difficile* are not described as having a current infection and this may represent carriage of this bacterium with diarrhoea being attributed to another cause. Patients with PCR+ve do need isolation and care is taken to prevent transmission into the environment or to other patients. This poses a higher number of patients requiring isolation facilities.

There remains a very low incidence of transmission within the hospital setting, with one instance of transmission identified in June 2021 on an older people's ward affecting less than 5 patient's. Learning from the incident review suggests that it may have been related to commode cleaning and changes in practice around allocation of commodes to patients at risk of falls. This incident was closed once outbreak criteria had been met and re-audit had confirmed this. Recommendations and further learning included restricting number of inpatients on the ward, regular mattress audits and re-introduction of a cleaning schedule.

Much of this is the result of increased emphasis on hand hygiene and general cleanliness of the environment and equipment. Further work continues the other key risk factor for CDI and the use of antimicrobial medication.

The annual target for hospital attributable *Clostridioides difficile* associated disease was 55 cases in 21/22. This included those patients who had community onset diarrhoea but had been an inpatient in the previous 4 weeks and those patients who had onset of diarrhoea over 2 days after admission. Trusts are required under the NHS Standard Contract 2021/22 to minimise rates of both Clostridioides difficile (C. difficile) and of Gram-negative bloodstream Infections so that they are no higher than threshold levels set by NHS England and Improvement.

The total cases for UHD reported and deemed to be trajectory cases is set out in table four and figure one.

	Community onset	Community onset	Community onset	Healthcare onset
	community associated	indeterminate	healthcare associated	healthcare
	(COCA)	associated (COIA)	(COHA)	associated (HOHA)
University Hospitals Dorset	42	17	33	41

#### Table 3: Reported CDI cases 21/22

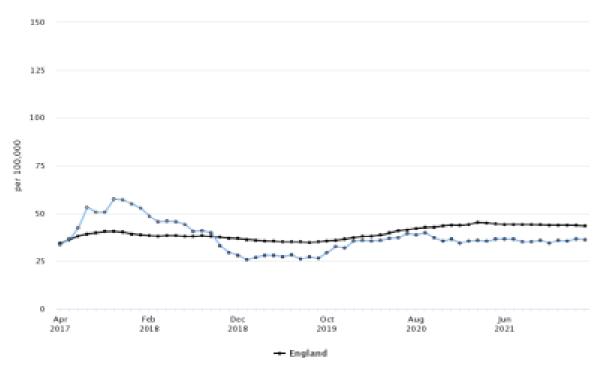
In common with previous years the Trust can appeal to the CCG, where there are cases with no identified lapses in care, to be classed as 'non-trajectory' and therefore not included in the target assessment. These cases are discussed at monthly meetings following a Post Infection Review carried out by the IPC Team and Ward leads in conjunction with medical staff. These are overseen and presented to the CCG by the Band 7 IPC Nurse, the outcome of this is outlined in Table Four.

Trust	СОНА	НОНА
University Hospitals Dorset	22	38

Table 4 CDI Cases added to trajectory

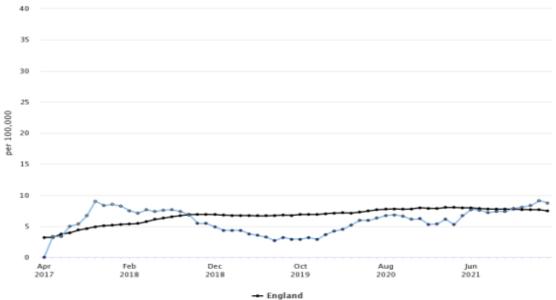
Therefore, UHD had 60 cases considered to fit the criteria as trajectory cases, which was 5 over the NHS trajectory set. Learning shows that delays in isolation, delays in obtaining samples and incomplete treatment were common themes in learning gained from post infection reviews. However, of the cases reviewed by the team no causative factors for the cases were found within UHD or the community.

Understanding the risk factors for acquiring this infection should be a key point for the IPC Teams across Dorset to focus upon, investing time and energy into the prevention of these cases is likely to have a greater impact on patient safety and outcome than following up these infections after the event.



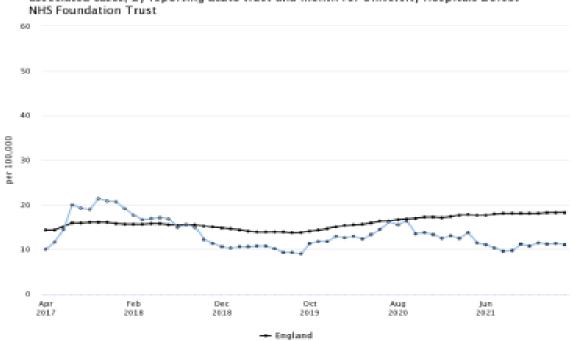
C. difficile infection counts and 12-month rolling rates of all cases, by reporting acute trust and month for University Hospitals Dorset NHS Foundation Trust

Figure 1 C. Difficile infection counts and 12 month rolling rates by reporting acute Trust



C. difficile infection counts and 12-month rolling rates of community onset-healthcare associated, by reporting acute trust and month for University Hospitals Dorset NHS Foundation Trust

Figure 2: C. Difficile infection counts and 12 month rolling rates of community onset community associated cases.



C. difficile infection counts and 12-month rolling rates of hospital onset-healthcare associated cases, by reporting acute trust and month for University Hospitals Dorset NHS Foundation Trust

Figure 3: C. Difficile infection counts and 12 month rolling rates of hospital onset community associated cases

Overall, there has been a reduction in hospital attributable cases since July 2020 with a rate of 16.2 cases per 100,000 bed days now down to 11. However, the overall rate of infection for UHD has gone up in successive years, the data for 2021 to 2022 is not yet available. *C.difficile,* however, remains on the Trust risk register and is reviewed regularly against trust performance. The rates of HOHA cases, see figure 1, are below the rates for England

Each case whilst being managed by the patient's clinical team is overseen and monitored by the IPCT. Prior to merger the Poole hospital IPC team and microbiologists had an established C.difficile Board Round with ward round for patients requiring follow up. Following merger and COVID-19 wave 2 this was established via MS Teams and now is a weekly multi-disciplinary team meeting, chaired by Clinical Infection Prevention & Control Nurse Specialist and includes duty microbiologists for both sites, Antimicrobial Stewardship Pharmacist, Gastroenterologists and clinical teams are invited. Clinical advice is agreed during the meeting and uploaded onto patient notes electronically for the ward teams to review. If there are concerns a ward round with IPC and microbiologist is arranged to follow the meeting. The group also discusses prescribing as well as *C.difficile* policy and national updates.

Additionally, other staff are invited to attend ad hoc for training and education. A detailed review of each case is completed which allows treatment modality changes to be made as led by the patient progression. This meeting is also used to assess good practice and lapses in care. The IPC Team use a national toolkit to identify both good practice and lapses in care and review every healthcare associated C. Difficile case. PIR meetings are held with Ward staff, Matrons and clinical leads. A UHD wide tool has been developed to help manage and track the actions and required processes to allow these to be prepared and presented to the Dorset PIR Group.

It should be noted that there is opportunity to increase the number of non-trajectory cases as some cases demonstrated a degree of care deficit which whilst do not directly cause infection can be associated with a risk of cross infection. Commonly, had specimens been collected earlier or isolation occurred when the first loose stool was noted then an assignment as a community case could have been made. Pressure on cubicle capacity is a principal reason for delay in isolation alongside comorbidities that can cause non-infectious diarrhoea.

When planning new builds and looking at refurbishments of areas this sort of information has been considered to ensure that we plan to increase the availability of isolation facilities.

#### 3.5 Meticillin Resistant Staphylococcus aureus (MRSA) Bacteraemia

There is no trajectory target set for MRSA bacteraemia's. However the overall UHD aim remains to ensure that we have zero recorded infections associated with healthcare.

In 21/22, there were 5 community acquired cases of bacteraemia caused by staphylococcal aureus demonstrating resistance to antibiotics (flucloxacillin) reported by the UHD laboratories and one hospital associated case. Each case will have been subject to a post infection review (PIR).

MRSA bacteraemia all rates by reporting acute trust and financial year for University Hospitals Dorset NHS Foundation Trust

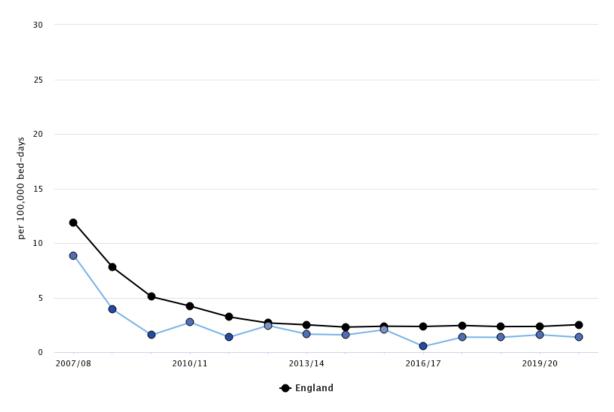


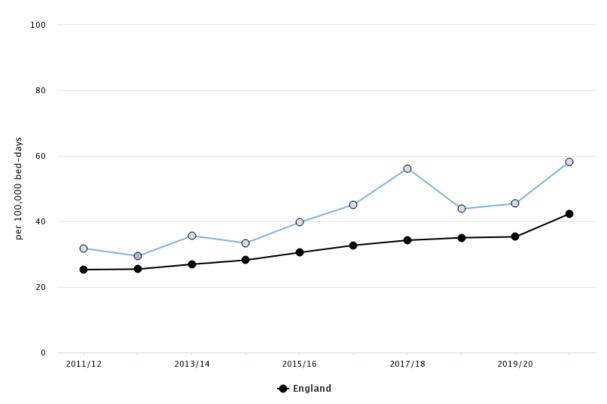
Figure 3: MRSA bacteraemia rates by reporting Trust (blue line is UHD)

#### 3.6 Meticillin Sensitive Staphylococcus aureus (MSSA)

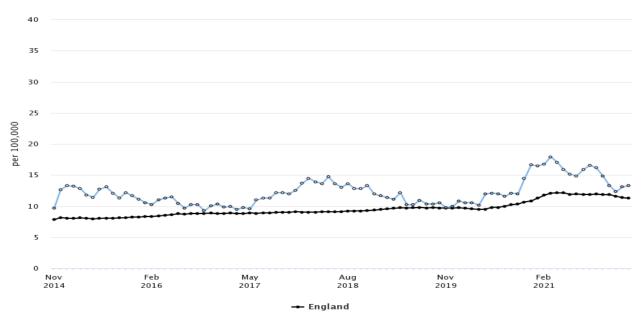
It is a requirement for Trusts to report all cases of MSSA bacteraemia but there is not a current target set. Cases are attributed as community onset community associated

(COCA), community onset healthcare associated (COHA) or healthcare onset healthcare associated (HOHA). The Trust uses the data it gathers from these infections to help inform and drive forwards relevant action plans.

Nationally, there has been an annual increase in cases, year on year since 2011 with the majority of cases arising in the community, common sources for these cases are related to skin and soft tissue infections. In 2020/2021 the England rate was 42.3 per 100,000 bed days with UHD sitting above this at 58.2 per 100,000 bed days. Data for 2021/2022 is not available yet on the national system, however, we know from the rolling rates that there is an upward trend in MSSA cases as outlined in Figure five.



MSSA bacteraemia all rates by reporting acute trust and financial year for University Hospitals Dorset NHS Foundation Trust



MSSA bacteraemia cases counts and 12-month rolling rates of hospital-onset, by reporting acute trust and month for University Hospitals Dorset NHS Foundation Trust

Figure 5: MSSA bacteraemia all rates by reporting acute Trust and Financial year

Source	Count
Skin/ Soft tissue	11
Invasive line related	13
Respiratory	6
Unknown	37
Genito-Urinary Tract	10
Post operation	1
Septic arthritis	5
Parotitus	1
Indwelling device	3

Table: Sources of infection identified through post infection review

The Team is currently assessing the impact and need for introducing Octenisan body wash as a decolonisation method for a select group of inpatients. Studies performed in other areas have shown this to not only reduced risk of infection for those patients chosen to decolonise in this way but also reduce the risk of colonisation of other patients in the same ward.

#### 3.7 E. coli bacteraemia

Reporting of all *E. coli* bacteraemia is a mandatory requirement. *E.coli* is common gram-negative bacteria found in the gut and rates of infection have been rising year on year nationally. Common sites of infection in hospital associated case are urinary tract infection, hepato-biliary and gastrointestinal infection. Key areas for prevention of these cases are often found to be prevention of urinary tract infection, patient hydration and oral hygiene.

In 2017, the Secretary of State for Health launched an important ambition to reduce healthcare associated Gram – negative bloodstream infections by 50% by 2021. These infections contributed to approximately 5,500 patient deaths in England in 2015 (<u>https://www.england.nhs.uk/wp-content/uploads/2020/08/Gram-</u>

<u>negative\_IPCresource\_pack.pdf</u>). Approximately three quarters of *E coli* Bacteraemia occur in the community with the risk greater in the frail elderly and most common source of infection being the urogenital tract.

As part of aiming to reach this ambition UHD has historically carried out various projects looking at hydration, catheter care, provision of urinary catheter passports and detailed follow up of healthcare acquired cases. Community based projects have had a similar focus looking at potential methods to reduce these infections.

Data for 2021/2022 comparing UHD to national trends is not yet available, however the rolling case rates for COHA and HOHA cases remain above the national rates (See figures 6, 7 and 8).

Comparing data for patients who have been identified with this infection on admission (community acquired) demonstrates that the rate remains above the England rate but this has slightly decreased from 126 to 106 cases per 100,000 bed days (Figure 7).

Hospital onset cases (figure 8), have increased above the national trend from remained in line with the national trend showing a slight increase from 22 to 25 cases per 100,000. The IPC Team continue to assess each health care associated case to identify if a post infection review is required. The reviews seek to explore a possible source and ensure that no lapses in care contributed to the infection.

The trajectory for UHD has been set for 2022/23 for these bacteria is 113 cases, a considerable reduction from the previous target set at 194 cases. UHD data for 2021/

2022 showed that the combined data for COHA cases (42) and HOHA cases (90) lead to an accumulated total of 132 cases, well under the initial trajectory set.

Post infection reviews of the hospital associated cases has identified common sources for the cases. However, despite the time taken to review these cases, a source is not always able to be found. The PIR findings are set out below (figure six):

Source of infection	Count
Gastrointestinal	8
Hepatobiliary	7
Lower or upper respiratory tract	10
Lower or upper urinary tract	22
Bone or joint	1
Unknown	36
Skin	2

#### Figure 4 Sources of infection

Key projects for the coming year will be looking at invasive device care, hand hygiene for patients and hydration.

E. coli bacteraemia all rates by reporting acute trust and financial year for University Hospitals Dorset NHS Foundation Trust

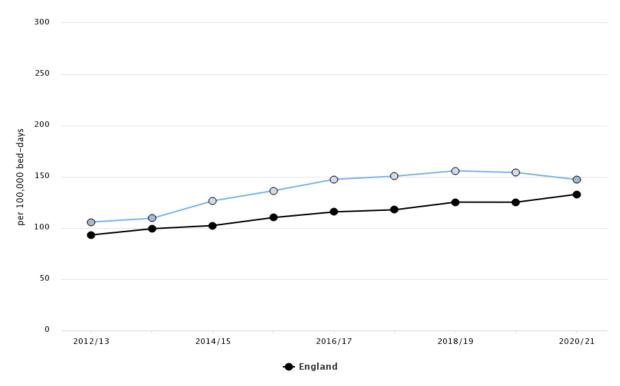
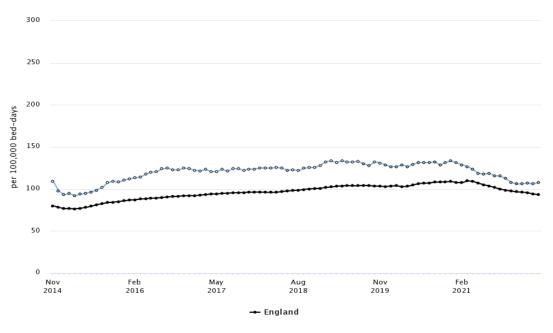
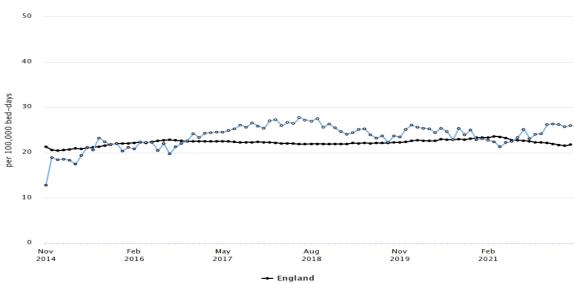


Figure 5: E. coli bacteraemia all rates by reporting acute Trust: UHD



E. coli bacteraemia cases counts and 12-month rolling rates of community-onset, by reporting acute trust and month for University Hospitals Dorset NHS Foundation Trust

Figure 6: Community onset case counts and rolling rates by reporting acute Trust

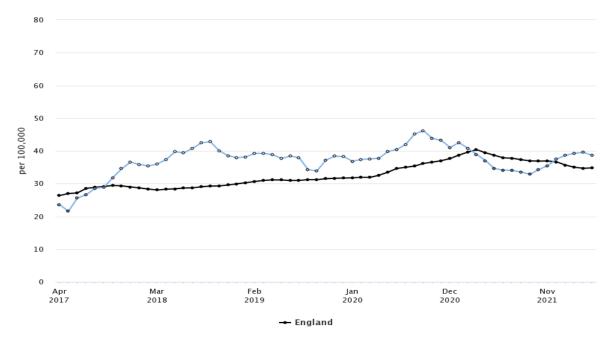


E. coli hospital–onset cases counts and 12–month rolling rates, by reporting acute trust and month for University Hospitals Dorset NHS Foundation Trust

Figure 7 Hospital onset case counts and rolling rates by reporting acute Trust

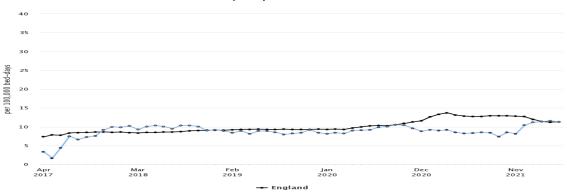
#### 3.8 Klebsiella species and Pseudomonas aeruginosa

Case counts for Klebsiella species have seen a national decrease in 21/22 following an increase, however, case rates remain slightly above that of 12 months ago at 34.8 per 100,000 bed days (Figure 10 and 11). Within UHD our overall case rates initially fell below the national rate and now sit just above at 38.7 cases per 100,000 bed days. Cases thought to be acquired as a health care associated infection currently sit in line with the national data at 11.3 per 100,000 bed days confirming that the majority of these infections are acquired in the community, as the community rate sitting at 27.4 cases per 100,000 compared to the national rate of 23.5



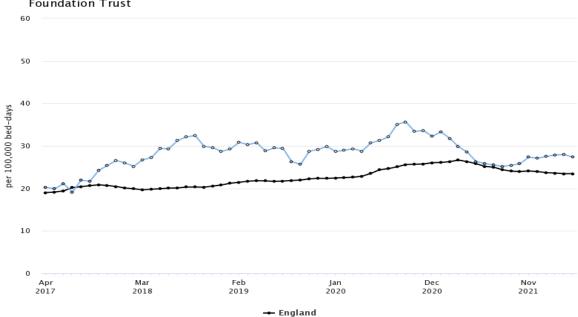
Klebsiella spp. bacteraemia cases counts and 12-month rolling rates, by reporting acute trust and month for University Hospitals Dorset NHS Foundation Trust

Figure 8: Klebsiella species case counts



Klebsiella spp. hospital-onset cases counts and 12-month rolling rates, by reporting acute trust and month for University Hospitals Dorset NHS Foundation Trust





Klebsiella spp. bacteraemia cases counts and 12-month rolling rates of communityonset, by reporting acute trust and month for University Hospitals Dorset NHS Foundation Trust

**Figure 10**: Community onset case counts and rolling rates by reporting acute Trust Case counts for *P.aeruginosa* remain in line with national rates at 11.9 per 100,000 bed days. Hospital onset cases were considerably lower than the national average during the first two quarters of 21/22, however this is back nearer to the national rate of 5 per 100,000 bed days. This change is most likely related to the small numbers of cases we see being easily observed in the data as this fluctuation can be seen regularly occurring. Community onset cases remain in line with national data at 8 cases per 100,000 bed days.

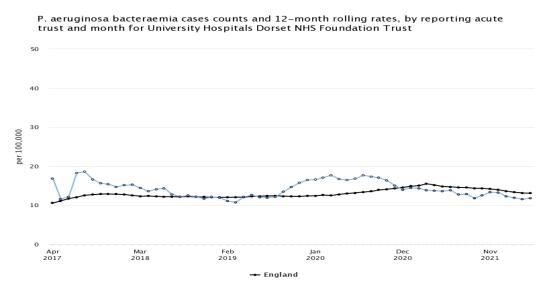


Figure 11 Pseudomonas case counts by reporting Trust

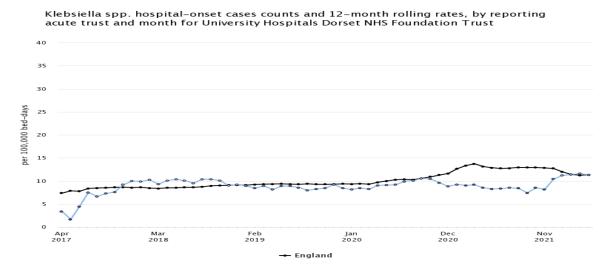


Figure 12 Pseudomonas hospital onset case counts

P. aeruginosa bacteraemia cases counts and 12-month rolling rates of communityonset, by reporting acute trust and month for University Hospitals Dorset NHS Foundation Trust

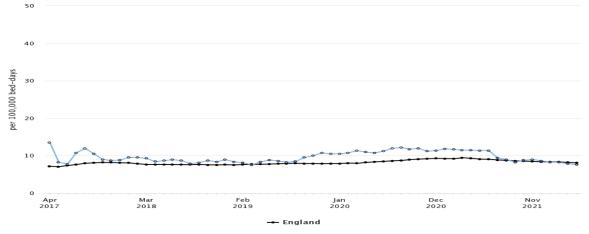


Figure 13 Pseudomonas community onset case counts

Post infection review completed for cases of hospital associated Klebsiella and Pseudomonas have found similar sources for that of E. coli; urinary tract, biliary and gastro intestinal.

#### 3.9 Seasonal Influenza and other circulating viral causes of ILI

During the traditional influenza period of 21/22 there were minimal hospital admissions to UHD and across the South West for influenza, as SARS CoV-2 was the predominant circulating virus See figure 16 for more details

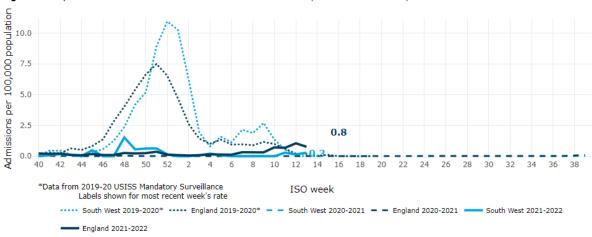


Figure 3. Hospital admissions with confirmed influenza - SARI Watch (Sentinel Surveillance)

Figure 14: Hospital admissions with confirmed influenza

Overall, in the South West, cases of respiratory viruses were reported in line with national data but very much outside the usual seasonal trends (Figure 17). As we step away from universal mask wearing and other IPC practices in the community shift back to pre-pandemic state, we should expect to see these cases return to seasonal variations ensuring vigilance is maintained on southern hemisphere trends to inform our planning.

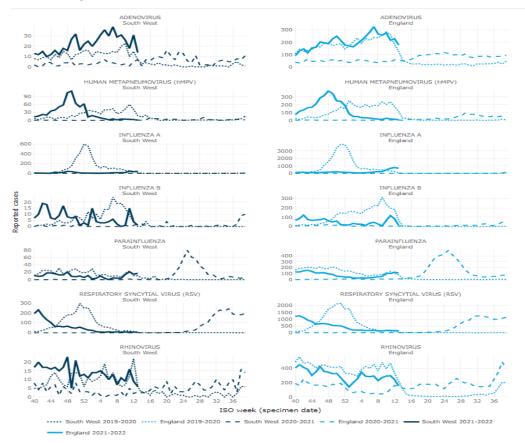


Figure 15: Reported cases of influenza and other respiratory viruses

#### 3.11 SARS CoV-2

A separate report covering SARS-CoV 2 outbreaks for quarter three and four 2021/22 and the impact of this is being written and will sit as an adjunct to the annual report.

Admissions of cases of COVID-19 in 21/22 continued to follow national trends. Married with an increase in community cases rose, as did hospital admission and staff cases. With a decreasing severity impact on patients, admissions to critical care and mortality following infection remained low and mostly associated with the highly vulnerable.

The impact of this has been felt in all areas of the Trust from admission areas through to rehabilitation and the impact on discharge. It is an established fact that the longer patients remain in hospital the more at risk of acquiring an infection they become, this is having been consistently seen with COVID-19 as many of our hospital onset cases have been in those patients who were medically ready for discharge (This will be explored further in the outbreak report).

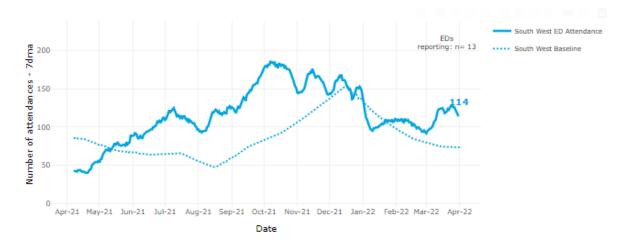


Figure 16: ED attendance for acute respiratory infection across the South West

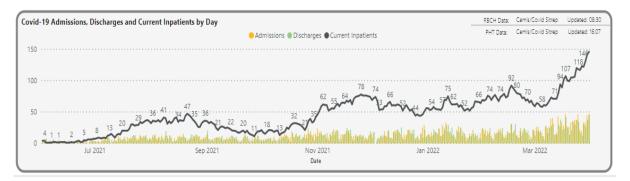


Figure 17 UHD COVID-19 admission, discharges and inpatients 2021/2022

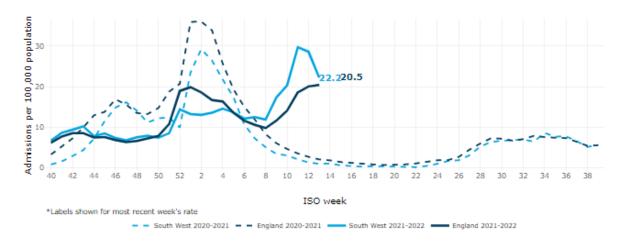


Figure 18 SW Hospital admissions with confirmed SARS CoV-2

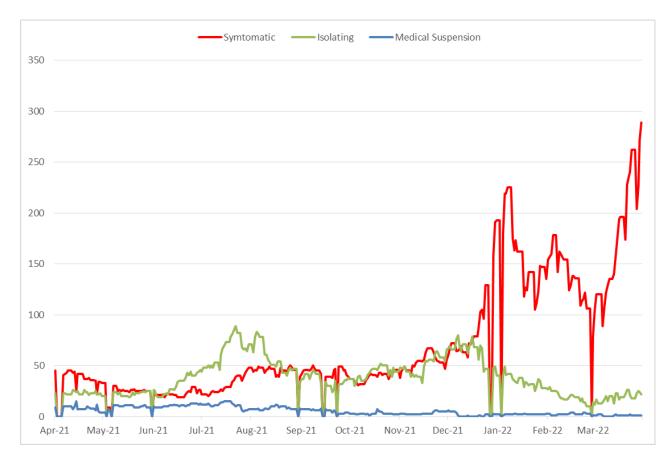


Figure 21: UHD Staff illness report April 21 to March 22

National gov.uk and PHE Guidance continued to adapt and change to the impact of the viral illness with 12 major changes to national guidance implemented across the Trust in 21/22. This continued to be the dominant driver of the workload for the IPC Team with the additional workload of business-as-usual organisms requiring significant input.

Through 2021 to 2022 the IPC Team dealt with over 5,100 cases that were tested within UHD exclusive of results for staff. Each of these cases required assessment to ascertain HCAI classification for national reporting and if contract tracing was required.

The team managed 44 confirmed outbreaks and multiple bay closures in 21/22 to ensure that the risk of further transmission was mitigated as much as feasibly possible within a pandemic.

#### 3.12 Mandatory reporting of surgical site infection (SSI)

The Trust was not able to support surveillance throughout 21/22 for all specialities covered. The pressures on the Surgical Teams & Infection Prevention and Control Team prevented this being set up, however, mandatory surveillance was completed for Hip Replacement, Neck of Femur replacement and Knee replacement surgery. Data (figure 21-23) for 2021/2022 did not highlight any patient readmissions with a surgical site infection. National rates of infections for these operations vary between 0.8% and 1% so it is important that whilst we should view this as successful, we should check and challenge our processes for capturing data to ensure it is accurate.

Repair of neck of femur

January - March 2022

Operations &	Operations & surgical site infections		Your hospital	
		Selected period	Last 4 periods	
	Total no.	152	710	
Operations	No. with PQ given	140	642	
	% PQ completed	99.3%	99.8%	
	No. inpatient/readmission	0	1	
	% infected	0.0%	0.1%	
	No. post-discharge confirmed	0	1	
Surgical Site Infection	% infected	0.0%	0.1%	
	No. patient reported	0	4	
	% infected	0.0%	0.6%	
	All SSI	0	6	
	% infected	0.0%	0.8%	

Table 1: No. of operations and completed post-discharge questionnaires with rates of SSI

Table 2: Results from all hospitals* in this surgical category for the previous 5 years available ( Apr-Jun 2017 to Jan-Mar 2022 ).
---

Operations & surgical site infections			All hospitals	
		Without PQ	With PQ	Total
Operations	Total no.	55665	36138	91803
	% PQ completed	-	77.8%	0.0%
	No. inpatient/readmission	570	158	728
	% infected	1.0%	0.4%	0.8%
	No. post-discharge confirmed	19	50	69
Surgical Site Infection	% infected	0.0%	0.1%	0.1%
	No. patient reported	No data	90	94
	% infected	No data	0.2%	0.1%
	All SSI	589	298	891
	% infected	1.1%	0.8%	1.0%

Figure 19: Repair of Neck of Femur SSI data

#### Knee replacement

Table 1: No. of operations and completed post-discharge questionnaires with rates of SSI by selected period (Jan-Mar 2022) and the last 4 periods for which data are available (Jan-Mar 2022, Oct-Dec 2021, Jul-Sep 2021, Apr-Jun 2021) at your hospital.

Operations & surgical site infections		Your hospital	
		Selected period	Last 4 periods
	Total no.	107	295
Operations	No. with PQ given	107	292
	% PQ completed	96.3%	97.3%
	No. inpatient/readmission	0	0
	% infected	0.0%	0.0%
	No. post-discharge confirmed	0	0
Surgical Site Infection	% infected	0.0%	0.0%
	No. patient reported	0	0
	% infected	0.0%	0.0%
	All SSI	0	0
	% infected	0.0%	0.0%

### Table 2: Results from all hospitals\* in this surgical category for the previous 5 years available ( Apr-Jun 2017 to Jan-Mar 2022 ).

Operations &	surgical site infections		All hospitals	
		Without PQ	With PQ	Total
Operations	Total no.	99663	236961	336624
	% PQ completed	-	75.1%	0.0%
	No. inpatient/readmission	437	441	878
	% infected	0.4%	0.2%	0.3%
	No. post-discharge confirmed	219	743	962
Surgical Site Infection	% infected	0.2%	0.3%	0.3%
	No. patient reported	No data	1632	1763
	% infected	No data	0.7%	0.5%
	All SSI	656	2816	3603
	% infected	0.7%	1.2%	1.1%

\*Please refer to 2.4 Definition of Terms at the back of this report for an explanation of data included in the benchmark.

#### Figure 20: Knee replacement SSI data

#### Hip replacement

January - March 2022

Table 1: No. of operations and completed post-discharge questionnaires with rates of SSI by selected period ( Jan-Mar 2022 ) and the last 4 periods for which data are available ( Jan-Mar 2022, Oct-Dec 2021, Jul-Sep 2021, Apr-Jun 2021 ) at your hospital.

Operations &	surgical site infections	Your	hospital
		Selected period	Last 4 periods
	Total no.	123	329
Operations	No. with PQ given	123	328
	% PQ completed	95.9%	93.3%
	No. inpatient/readmission	0	0
	% infected	0.0%	0.0%
	No. post-discharge confirmed	0	0
Surgical Site Infection	% infected	0.0%	0.0%
	No. patient reported	0	0
	% infected	0.0%	0.0%
	All SSI	0	0
	% infected	0.0%	0.0%

Table 2: Results from all hospitals  $^{\star}$  in this surgical category for the previous 5 years available ( Apr-Jun 2017 to Jan-Mar 2022 ).

Operations &	surgical site infections	97658 229344 32700   - 77.0% 0.0%   533 454 987   0.5% 0.2% 0.3%   149 576 725   0.2% 0.3% 0.2%		
		Without PQ	With PQ	Tota
Operations	Total no.	97658	229344	32700
	% PQ completed	-	77.0%	0.0%
	No. inpatient/readmission	533	454	987
	% infected	0.5%	0.2%	0.3%
	No. post-discharge confirmed	149	576	725
Surgical Site Infection	% infected	0.2%	0.3%	0.2%
	No. patient reported	No data	734	802
	% infected	No data	0.3%	0.2%
	All SSI	682	1764	2514
	% infected	0.7%	0.8%	0.8%

Figure 21: Hip replacement SSI data

Future surveillance of post operation wound infections and surgical site surveillance will be greatly informed through ICNET. In October 2022 the system will have the addition of all surgical procedure data added to the patient record enabling for the first time the results of wound infections and surgical procedures to be analysed together in real time. This is currently being assessed through user acceptance testing by the IPC Team in conjunction with the IT team, theatres and Baxter.

As the Trust grows it is essential that this data is reviewed, The IPC Team will be working closely with the Surgical Care Group to understand how they can work together to share this data and establish stronger links with the possibility of cross team working to support the feedback and necessary improvements.

#### 3.13 Getting It Right First Time (GIRFT) surgical survey

The IPC Team will look to establish links with the teams looking at this for 2022 to 2023. No capacity to support any work in this project during the period was available we hope to be able to utilise the experience of a recent secondee to the IPC Team to help us deliver this.

#### 3.14 Hand Hygiene and bare below the elbows audit

Hand hygiene audits are undertaken monthly in all clinical areas of the Trust with results collated by the IPCT and reported monthly to Matrons and the Infection Control Group.

The Trust overall has met the target of achieving 95% in many areas for most of the time as outlined in figure 24. It is unclear how beneficial this audit is for patient care and how representative it is of IPC standards given the infrequency these audits are completed and the accepted Hawthorne effect (observed staff tend to achieve the expected behaviour).

A project looking at different ways of measuring hand hygiene is underway for 2022/ 2023 but the success and implementation of this is very much driven by the impact of COVID-19 on the time of the IPC Team.

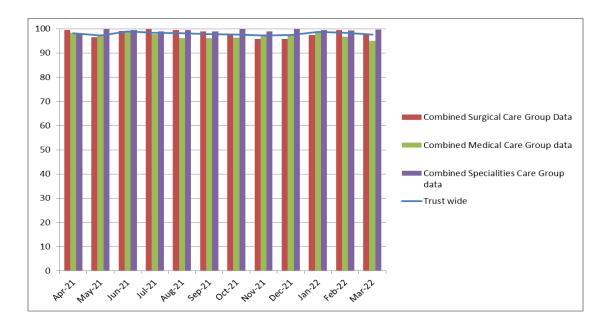


Figure 22 Hand hygiene data for 2021/2022

#### 4.0 PROVIDE AND MAINTAIN A CLEAN AND APPROPRIATE ENVIRONMENT

#### 4.1 Healthcare Cleaning

Across UHD there are two different cleaning services, the Bournemouth site has their own team with Poole covered by Mitie.

Throughout the pandemic both teams have continued to be instrumental in ensuring that all areas are as clean as possible supporting deep cleans, terminal cleans and essential cleaning.

The updated Cleaning and Healthcare Standards has been reviewed and is implemented across UHD. As we move into the next phase of reporting and sharing the information captured through the audits, we will need to understand how this is received by our patients and external partners and how it drives action/ change.

#### Bournemouth & Christchurch report

The results from the areas audited on the Bournemouth & Christchurch sites are shown in figures 25-28. The findings from these demonstrate excellent standards being achieved across the site. The auditing team raise and rectify any failure at the point of audit at each failure point the audit.

#### Star Rating number of areas that achieved

Risk Category	****	****	***	**	*
FR1 Risk Category	14.00	0.00	0.00	0.00	0.00
FR2 Risk Category	33.00	0.00	0.00	0.00	0.00
FR3 Risk Category	3.00	0.00	0.00	0.00	0.00
FR4 Risk Category	7.00	0.00	0.00	0.00	0.00
FR5 Risk Category					
FR6 Risk Category	0.00	0.00	0.00	0.00	0.00

Figure 23: Star ratings for the Bournemouth site

				Numb	or of Are	ac And	itad						
	Number of Areas Audited												
	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	
FR1 Risk Category					12	12	14	13	14	14	14	14	
FR2 Risk Category					38	37	39	34	34	37	35	37	
FR3 Risk Category					5	4	5	4	1	5	1	3	
FR4 Risk Category					8	5	9	7	7	7	7	9	
FR5 Risk Category													
FR6 Risk Category					1	1	1	0	0	2	1	0	
Total	0	0	0	0	64	59	68	58	56	65	58	63	

Figure 24 Areas audited against risk category for the Bournemouth site

	Star Rating for Each Risk Categories												
	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	M ar-22	Äpr-22	May-22	Jun-22	
FR1 Risk Category					5 Stars								
FR2 Risk Category					5 Stars								
FR3 Risk Category					5 Stars								
FR4 Risk Category					5 Stars								
FR5 Risk Category													
FR6 Risk Category					5 Stars	5 Stars	5 Stars			5 Stars	5 Stars		

Figure 25 Starr rating for each risk category for the Bournemouth site

Yearly average Monitoring Scores for Housekeeping

	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22
FR1 Risk Category					99.76	99.69	99.68	99.66	99.55	99.81	99.72	99.72
FR2 Risk Category					98.76	98.80	98.42	98.88	98.66	98.75	98.37	98.79
FR3 Risk Category					99.20	98.11	97.60	99.04	100.00	99.53	98.30	98.89
FR4 Risk Category					97.58	97.48	97.18	95.23	98.31	97.96	96.72	97.77
FR5 Risk Category												
FR6 Risk Category					97.41	97.41	100.00			99.16	99.31	
Trust overall average					98.54	98.30	98.58	98.20	99.13	99.04	98.48	98.79

Figure 26 Yearly average Monitoring Scores



Figure 27 Terminal and Discharge cleans completed for the Bournemouth site

The impact COVID-19 has had on the high volume (3,363) of terminal cleans and discharge cleans in April 2020 on the Bournemouth site which have reduced to averaging 1,100 per month in 2022.

#### Poole site report

The results from the areas audited on the Bournemouth & Christchurch sites are shown in figures 30-34.

Number of Areas	Achieving					ļ						
	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
5 star						80	72	103	84	119		
4 star						6	3	7	5	2		
3 star			P	re-NSoHC	21	1		1	3			
2 star	1						1			2		
1 star	1									1		
								88	75	111	95	121

Figure 28 Star rating report for the Poole site

Number of Area	6 Audited (P	er Functior	nal Risk Cat	tegory)								
	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
FR1							46	33	42	41	45	
FR2						27	27	30	31	32		
FR3			D	re-NSoHC	4	4	4	2	4			
FR4			P	IE-NSURC.	10	11	30	15	30			
FR5						0	0	0	1	1		
FR6								1	0	5	5	9
otal	116	117	162	109	107	117	111	88	75	111	95	121

Figure 29 Number of areas audited for the Poole site

Number of Areas A	Achieving												
	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Total
5 star								80	72	103	84	119	458
4 star							6	3	7	5	2	23	
3 star			P	re-NSoHC 2	21	1		1	3		5		
2 star								1			2		3
1 star											1		1
								88	75	111	95	121	

Figure 30 Number of areas achieving a star rating for the Poole site

verage Monitori	ng Score												
	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Avg
FR1 (98%)						99	99	99	97	99	99		
FR2 (95%)	1						98	99	99	98	98	98	
FR3 (90%)	1			re-NSoHC				98	99	97	99	98	98
FR4 (85%)	1		PI	re-INSOHC.	21			98	97	97	97	97	97
FR5 (80%)	7										99	94	97
FR6 (75%)	1							95		98	98	96	97

Figure 31 Average monitoring scores for the Poole site



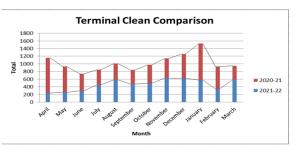


Figure 32 Terminal Cleans completed for the Poole site and Terminal clean comparison 20/21 vs 21/22 for the Poole site

The Trust enjoys a very good working relationship with the Mitie contractor and its staff. The team always go above and beyond to support the Trust in its endeavours to keep the site clean and safe for patients, visitors and staff.

#### Medical Device Cleaning

Audits carried out across the Trust have identified that attention should be drawn in all areas to the cleaning of these devices. The Trust has implemented action plans to address these gaps and has seen the beginnings of improvement, however there is some way to go before these are achieving acceptable standards.

#### 4.3 Patient-led assessments of the care environment (PLACE)

No PLACE assessments were completed during 21/22. And are due to restart in September 2022.

#### 4.4 Estates

The IPCT has long established good working relationships with estates staff and management and on a daily basis liaise to prioritise, troubleshoot and address issues raised at ward and departmental level. It is noted that in some areas of the Trust the age and design of the building and its fabric can pose challenges in cleaning and optimal infection prevention.

The IPC Team also work closely with the Estates team in reviewing and planning for departmental modifications, new builds and maintenance. Over the course of the last 12 months many projects have been started addressing upgrades and maintenance on both sites as well as the "big build" projects planning for the major site changes. These projects require close co-ordination to ensure that IPC is not reduced, or associated risks raised as a result of changes or the works being completed. The IPC Team now meet with the Estates planning teams and project review teams monthly to review and ensure developments have oversight in line with the Trust IPC policy.

Through the course of the pandemic several areas required deep cleans following outbreaks which highlighted several wards that needed essential maintenance completed to meet IPC Standards. The Estates team have completed many of these projects under extreme pressure but there remains a number of areas that require up grade and on-going maintenance to meet required standards. Balancing these

requirements against the planned changes for each area and the constant pressure to support patient flow into the organisation has meant that many of these are delayed.

The ability to ensure there is a decant ward available to allow for this sort of works to be completed would be a recommendation out of the findings from this report and associated reviews during the pandemic.

The introduction of a Trust Wide docket reporting and sign off system will greatly help ward managers and estates work closely to ensure that required works are assessed, prioritised and signed off after completion.

#### **Specialist Ventilation**

The Trust has a Ventilation Safety Group that reports into the Infection Prevention and Control Group.

The Group meets monthly and has supported the assessment against COVID-19 risk assessments required to meet IPC and H&S guidance. The group is supported by the Trust authorised engineer, leads from the estate's teams and clinical representation.

The Trust is continuing to assess the requisite areas for good ventilation using the HSE and HTM guidance as a base line to complete this<sup>i</sup>.

#### Water Safety

Water safety is an important element in the Trust's infection prevention work. Key to maintaining a water supply free from pathological bacteria including pseudomonas and legionella is a system of planned preventative maintenance and monitoring to ensure:

- that all parts of the system are clean (tanks to taps);
- the flow of water is maintained (no dead legs or poor flow/low use);
- the temperature is maintained (hot, 55 degrees and cold below 20 degrees)

The IPC Team work closely with the Estates team on water quality and are involved in policy development and planned sampling of areas. The Trust has a monthly Water Quality meeting chaired by the Associate Director of Estates which is attended by a member of the IPCT. The water testing programme including assessment of legionella and pseudomonas, is on-going with any positive samples being actively managed.

#### **Decontamination Services**

Decontamination Services comprise distinct areas; Endoscopy Decontamination, Medical Equipment, Cleaning and Decontamination Unit, (MECDU) and the Sterile Services Departments.

#### **Sterile Supplies Department**

The Sterile Services for UHD is now provided on one site, Alderney. This department provides sterile surgical instruments to all theatres, the trust wide wards and departments. The departments continue to work and maintain the standards set in the regulatory requirements (HTM) 01-01 and (HTM) 01-06. All weekly, quarterly and annual testing is up to date.

#### **Endoscopy Decontamination Department**

Both sites use their own Endoscopy decontamination services based on each site. All weekly testing is conducted by the Trust Engineers and the Endoscopy Technicians. Quarterly and annual testing is conducted by the manufacturer (Getinge). The equipment remains compliant with required standards and has been signed off and approved by the Authorised Engineer (Decontamination) AE (D).

#### Medical Equipment Cleaning and Disinfection Unit (MECDU Poole)

The MECDU underwent complete refurbishment in 2014 to provide appropriate equipment and workflow for decontamination of equipment including pressure relieving mattresses. All machines are regularly maintained and serviced. The unit was recognised as a valuable asset to the trust by the Public Health England, Consultant Clinical Scientist who visited the Trust.

The medical equipment library is set up on the Bournemouth site with the provision to support additional cleaning as and when required. This is particularly focussed on the larger items of equipment such as mattresses that require taken apart to repair/ test and clean before returning into use.

#### 5.0 ENSURE APPROPRIATE ANTIBIOTIC USE TO OPTIMISE PATIENT OUTCOMES

- 5.1 UHD now has access to all antibiotic policies via smartphone and web-based app, the policies for this are regularly reviewed and updated by the microbiologists.
- 5.2 A formal multi-disciplinary Antimicrobial Stewardship Group meets 3 4 times per year on each site and reports to the medicine's optimisation group, the minutes of the meetings are also sent to the Infection Control Group. This group has not yet merged Trust wide.
- 5.3 There is now a Dorset wide AMR group which has not been able to meet as often as required due to the constraints of the pandemic but plans to restart this group are in place
- 5.4 The medical microbiologists alert clinicians and ward staff when specific organisms or infection are identified including all those which have control of infection implications.
  - 5.5 The Infection Control Clinical Team obtain daily updates of key organisms isolated from the ICNet Infection Control System which is linked to the Microbiology Laboratory Information Systems. This system, tested from December 2020 to February 2021 and introduced in April 2021 in now in place across UHD. The impact of this system on the Trust and the IPC Team will be explored on a wider basis in subsequent quarterly reports. Relevant wards can then be immediately informed. During normal working hours the ICN's visit wards to discuss results and provide advice on the relevant care required. Patients with Clostridium difficile are visited on a daily basis (Mon-Fri) to review progress as well as on the *C.difficile* ward round.

### 6.0 PROVIDE SUITABLE ACCURATE INFORMATION ON INFECTIONS TO SERVICE USERS, VISITORS ANY PERSON CONCERNED WITH PROVIDING FURTHER SUPPORT OR NURSING/MEDICAL CARE IN A TIMELY FASHION

6.1 On the Poole site each in-patient ward has a large purpose designed patient safety board which includes Infection prevention metrics. These provide a standardised format for sharing key metrics such as hand hygiene and cleanliness scores with staff, patients and carers. They are increasingly being used as part of ward safety briefings

undertaken by staff. Understanding how UHD wish to pursue this line of information sharing and communication is a project for the coming year.

- 6.2 The Trust has a range of patient information materials that are made available via the IPCT pages of the Intranet. The IPCT proactively provide these directly to patients admitted to hospital. These are currently under review in order to create UHD wide versions of this information
- 6.2 Cross site the Trust is implementing the standards set within the national cleaning manual and each area is displaying the poster for their area with the cleanliness star score.
- 6.6 A Critical Patient Information (CPI) flag is added to the electronic patient record of all patients with specific infections or organisms, e.g., MRSA, MARO, C. difficile, ESBL producing bacteria. This ensures if the patient is re-admitted this information is immediately available to the clinical staff. Staff are prompted to look for the flags through the Electronic Nursing Assessment tools.
  - 6.7 The IPC Team advise GPs in writing when a first isolate of MRSA or *Clostridium difficile is* identified. This information is also communicated in writing to patients if the result is obtained after discharge from hospital. A dedicated section of the electronic discharge summary promotes communication of infection related topics.

## 7.0 ENSURE PROMPT IDENTIFICATION OF PEOPLE WHO HAVE OR ARE AT RISK OF DEVELOPING AN INFECTION

- 7.1 Both Microbiology Laboratories have full Clinical Pathology Accreditation status within UHD. This includes access to PCR testing for many respiratory organisms aswell as MRSA, Norovirus and *Clostridium difficile*. *C. difficile* tests are provided seven days a week with results available the same day.
- 7.2 The support from the laboratory staff during the pandemic has been exemplary. The number of additional testing processes and platforms that have been incorporated in business as usual is astounding. However, this has meant that routine testing for many other organisms has stopped or been reduced. Understanding the impact of this will be a project for the next 12 months as we look to understand what are the key pieces we need to reintroduce and what can remain at their current level.

7.3 All infections or organisms identified with control of infection implications are brought to the attention of medical and nursing staff immediately either by the Consultant Microbiologists, Infection Control Nurses or laboratory staff.

#### **MRSA Screening**

- 7.4 MRSA screening is now targeted at patients with known risk factors for carriage including previous carriage. Screening for patients at risk of infection continues by screening all patients who have a planned or non-elective invasive medical device inserted as part of their care.
- 7.5 As a Trust we need to reassess who is screened and when in line with the changes made during the pandemic, the IPC Team plan to develop an assessment tool to look at how we complete the assurance around this key screening.

#### Carbapenemase Producing Enterobacteriaceae (CPE) screening

- 7.6 The national toolkit for controlling the spread of CPE (a group of highly resistant bacteria) advises that all patients with a recent history of in-patient stay in certain UK and foreign hospitals be screened for carriage of the organisms. Through this screening the Trust identifies a small number of patients each year that are carriers and strict infection control precautions are put in place. The Trust has continued to see patients with risk factors being admitted but screening has excluded this risk during the year.
- 7.7 This policy has been updated and now includes the necessity to screen a much wider group of patients. The Trust is currently assessing the impact of this policy change which has not yet been implemented due to the pressures on the laboratory described above.

#### Hospital Outbreaks of Microorganisms

- 7.8 Covid-19 Outbreaks were reported across UHD during the period of March 2021 to April 2022. These will be covered within a separate report
- 7.9 Outbreaks of Norovirus were also reported during this period.

### 8 SYSTEMS TO ENSURE THAT ALL CARE WORKERS (INCLUDING CONTRACTORS AND VOLUNTEERS) ARE AWARE OF AND DISCHARGE THEIR RESPONSIBILITIES IN THE PROCESS OF PREVENTING AND CONTROLLING INFECTION.

- 8.1 The IPC Team have had great success merging the IPC Link staff and Safety Pin groups to create UHD wide champion role. There are now at least 2 IPC Champions in each area, we are currently supporting planning an away for the Medical Care Group IPC champions and hope to do the same for the other 2 care groups.
- 8.2 Infection prevention and control is included in all clinical staff job descriptions emphasising that all staff have responsibilities in this area.
- 8.3 All new staff to the Trust receives training as part of the corporate induction with additional training provided to clinical staff. Contracted Estates staff receives a written information sheet suitable for their needs with sign posting to further information. Infection control training is further provided as a mandatory update for all clinical staff.
- 8.4 The IPCT provide and in-put to a variety of formal training programmes including:
  - Induction
  - Healthcare assistant training programme
  - Mandatory update training
  - Emergency Planning
  - Intravenous medication administration
  - Fit testing of filtering face piece masks
  - Adhoc topic-based learning across the Trust in response to specific demands
- 8.5 Compliance with the mandatory update training target of 95% is variable by staff group. Overall compliance at year end was 85% across UHD.
- 8.6 The service aimed for by the IPCT is high visibility and accessible to staff which fosters engagement and support for the activities of the team. Reaching this standard with the challenges for a lean team under the pressure of responding over a prolonged period of time has been hard. Additional vacancies and sickness have also contributed to this.
- 8.7 The addition to the IPC Team of a Band 4 role has enabled many IPC projects to restart. This role has been delivered in a way that establishes really strong links with staff at ward level enabling teams to work together with the post holder to really understand their educational needs and drive quality improvement to reduce IPC Risks.

#### 9 PROVIDE OR SECURE ADEQUATE ISOLATION FACILITIES

- 9.1 The Trust has a high proportion of single accommodation on the Poole site but this is less well provided on the Bournemouth site.
- 9.2 The Infection Prevention and Control Principles policy available on the intranet gives details of the necessary transmission-based and standard precautions for infections. It includes details about allocation of cubicles based on priority. There are also infection control policies relating to specific infections together with a Surveillance policy on the intranet.
- 9.3 Whilst in the past it was considered that there were adequate single rooms on the historic increase in influenza and outbreak of Klebsiella on the Poole site plus the ongoing learning from COVID-19 has challenged this assumption. There are currently several areas across the Trust that have added in additional isolation facilities and plans to adapt current services are under way to ensure that we strive to meet the NHS I/ DoH target of 70% isolation facilities.
- 9.4 Overall, the Trust has sufficient single rooms to cope with normal operational workload however, when under pressure from community outbreaks this is stretched particularly in AMU, assessment units, critical care and the emergency departments. This will be considered in any future service development or reconfiguration.
- 9.5 Audits carried out post identification of an alert organism that requires isolation often find that patients have had a delayed transfer into a cubicle due to unavailability and a delayed identification. Additional side rooms to support this are key to help us reduce health care acquired infections.
- 9.6 The IPCT support the site management teams with side room audits to help assess and prioritise cubicle allocation. This is supplemented by an isolation risk assessment tool available to all staff.

#### 10 SECURE ADEQUATE ACCESS TO LABORATORY SUPPORT

10.1 There is a microbiology laboratory on both sites within the Trust offering a bacteriology, virology (Poole only), mycology and mycobacteriology diagnostic service with access to clinical and infection control advice from the consultant microbiologists.

## 11. HAVE AND ADHERE TO POLICIES THAT WILL HELP TO PREVENT AND CONTROL INFECTION

- 11.1 A comprehensive set of over 30 detailed infection control policies are available to all staff on the hospital intranet with easy access through a link on the front page of the website. Policies requiring updates during the year are included in the work plan. There has been some slippage during the year and updates remain ongoing for many of the policies, there is a plan in place to address this risk and ensure that no major changes within the policy are able to create a clinical risk.
- 11.2 In addition, the majority of antibiotic policies for empirical management of infection in adults and for antibiotic prophylaxis are also available on the intranet.
- 11.3 The trust has an on-site occupational health service that will see and advise staff about infections with regular liaison with the IPCT.
- 11.4 The OH service assesses and reviews staff that have had occupational exposure to blood and body fluids including needle-stick injury. This service works closely with IPCT and Risk management in this and other work including promoting education and best safe practice.
- 11.5 The service has worked closely with the IPCT in areas such as dermatitis and sharps safety as well as the response to COVID-19. There remain on-going concerns that staff continue to have exposure incidents despite ongoing education and active management through the Sharps Safety Group. Exposure incidents are included on the Trust risk register.

#### 12.0 Conclusion

Overall, the Trust has maintained systems and processes to drive the delivery of the Infection Prevention Code of Practice. The success of this has been limited by ongoing Consultant Microbiologist vacancies and a lean IPC Team. To grow with the services and expectations that UHD have, both of these teams need further support and review.

The Trust experienced unprecedented challenge posed by the outbreaks of COVID-19. Trust staff worked hard to manage these demands and engaged with national and local initiatives to reduce the incidence and risk of infection. The learning from these outbreaks will continue to be shared and adapted to. The examination of trust services has demonstrated the ongoing need to increase compliance with training and champion standard precautions for infection prevention including cleaning, hand hygiene and use of invasive devices.

The fundamentals of Infection Prevention and Control practice and how these are communicated and adopted will be key to ensuring we achieve successes in the next 12 months.

#### References

<sup>&</sup>lt;sup>i</sup> <u>https://www.hse.gov.uk/coronavirus/equipment-and-machinery/air-conditioning-and-ventilation/index.htm</u> accessed 14th September 2021