NHS
East Suffolk and North Essex
NHS Foundation Trust

Board of Directors

Report Title:	Infection Prevention & Control Annual Report
Executive/NED Lead:	Melissa Dowdeswell, Interim Chief Nurse
Report author(s):	Michelle Biggins and Vicky Bywater Deputy Heads of Infection Prevention and Control (Co-leads for ESNEFT)
Previously considered by:	PEG / IAC – approved.

☐ **Approval** ☑ **Discussion** ☑ **Information** ☑ **Assurance**

Executive summary

The annual report provides a summary of the Infection prevention and control activity over the last year and status of the healthcare associated infections (HCAIs) for ESNEFT, and provides evidence to support compliance with the Health and Social Care Act – Code of Practice on the prevention and control of infections 2008 (updated 2015) criterion 1-9, and the Health and Social Care Act 2008 (regulated Activities) Regulations 2014: Regulation 12: Safe care and treatment.

The Chief Nurse is the accountable board member responsible for infection prevention and control and undertake the role of the Director of Infection Prevention and Control.

The Board is asked to approve the report noting the key achievements:

Key Achievements

- **Performance –** generally low levels of ***C difficile*** – 12 cases deemed as avoidable against a target of 107 (at the time of writing). One case of **MRSA bacteraemia** was identified across the Trust, this was assessed as non-avoidable. ***E coli*** **Bacteraemia –** numbers remain high in the community with hospital numbers proportionately lower, please see graphs.
- **'Governance'** – evidence that IP&C reporting is discussed and acted upon at divisional and departmental level. Good attendance and engagement by divisions through Infection Control Committee (ICC). Teams actively involve Infection Prevention and Control through the Accountability Framework.
- **Infection Prevention and Control policies and guidelines** – alignment of IP&C Policies across ESNEFT was completed for 10 out of the 13 related policies, this included the standardardisation of MRSA screening/management across ESNEFT.
- **Integrated computerised surveillance system –** the two hospital sites continue to run different versions of the same surveillance system to generate timely clinical reports supporting prompt action to manage IP&C. The upgrade of the Colchester site system has been temporarily delayed due to the pandemic.
- **Mandatory IP&C updates for all staff –** the overall percentage continues to be monitored monthly from the Training Portal.
- **Service provision–** The Consultant Microbiology team at Colchester has been depleted for some time, despite the recruitment of a Microbiologist in July 2019. One vacancy remains. An additional part-time Band 6 nurse was recruited to the Colchester Site, the nursing team saw two staff retire and one leave the organisation.

Action Required of the Board/Committee

The Board is asked to approve the report

Link to Strategic Objectives (SO)		**Please tick**
SO1	Keep people in control of their health	☑
SO2	Lead the integration of care	☑

Created: May 2020
Review: 2021
Author: Melissa Dowdeswell (Interim Director of Infection Prevention & Control/ Chief Nurse)

SO3	Develop our centres of excellence	☑
SO4	Support and develop our staff	☑
SO4	Drive technology enabled care	☑

Risk Implications for the Trust *(including any clinical and financial consequences)*	The Trust would not be compliant if it did not produce an annual report.
Trust Risk Appetite	Quality: The board is cautious when it comes to quality and places the principle of "no harm" at the heart of the decision. It is prepared to accept some risk if the benefits are justifiable and the potential for mitigation is strong
Legal and regulatory implications *(including links to CQC outcomes, Monitor, inspections, audits, etc.)*	Compliance with the Health and Social Care Act – Code of Practice on the prevention and control of infections 2008 (updated 2015) criterion 1-9, and the Health and Social Care Act 2008 (regulated Activities) Regulations 2014: Regulation 12: Safe care and treatment.
Financial Implications	None apparent.
Equality and Diversity	None apparent.

DIRECTOR OF INFECTION PREVENTION AND CONTROL

ANNUAL REPORT APRIL 2019 - MARCH 2020

Director of Infection Prevention and Control Annual Report	
1.Executive summary – Overview of Infection Prevention and Control (IP&C) activities in the Trust	3
Key achievements	4
On-going work/plans for 2020/21	4
2. Infection Prevention and Control arrangements	
Organisational structure and reporting line to the Trust Board	5
Infection Prevention and Control Team	6
Infection Prevention and Control Team Activities	7
Infection Prevention and Control Enquiries	8
Infection Control Committee	9
3. DIPC reports to the Trust Board – summary	
Outbreak Reports (MRSA, viral gastroenteritis, COVID-19 pandemic)	9
Estates and Planning	12
Water Safety Management	13
4. Budget Allocation to IP&C Activities	
Staff	17
Training & development opportunities for IP&C team 2019/20	17
Training requirements for the Team in the coming year	17
5. HCAI statistics	
MRSA bacteraemia	18
Clostridium difficile	19
MSSA bacteraemia	20

Created: May 2020
Review: 2021

Author: Melissa Dowdeswell (Interim Director of Infection Prevention & Control/ Chief Nurse)

Carbapenem resistant organisms	21
E Coli bacteraemia	21
Surveillance	22
Surgical Site Infection Surveillance	23
6. Hand hygiene	
Hand Hygiene	24
7. Cleaning Services	
Management arrangements	25
Monitoring arrangements	25
NPSA Audit results	26
Patient led assessment of the care environment (PLACE)	28
8. Decontamination	30
9. Audit	
Audit programme and outcomes	35
10. Antimicrobial stewardship group (ASG) report	37
11. IP&C Training Activities	
Induction and Mandatory update for all staff	41
Other training activities	41
IP&C link workers	41
12. IP&C Programme for 2020/21	43

Overview of Infection Prevention and Control (IP&C) activities in the Trust

The focus of infection prevention and control activity was to continue the good work already established in maintaining the low levels of *Clostridium difficile* particularly in light of the new way of attributing cases to the acute trust. Work concentrated on the alignment of the MRSA policy and procedure in light of six outbreaks of MRSA at Ipswich Hospital and at Felixstowe Hospital from May 2019 to January 2020. There have been other activities focussing on the risks of cross transmission of gram-negative organisms after a CRO (Carbapenem Resistant Organism) case at the Colchester Hospital site. The IP&C team supported ACE in the investigation of an outbreak of invasive Group A Streptococcus.

We continued to utilise the High Impact Interventions Saving Lives audit tool, to monitor the care of invasive devices and ventilator associated pneumonia. The hand hygiene monthly audits assist in raising awareness of this key infection prevention and control practice rates to monitor good infection prevention practice. These results were reported monthly to the board through a board sub-committee. The results were also monitored at local divisional governance groups through to the Infection Control Committee.

In light of the merger in 2018, the Infection Control Committee changed its name and removed the 'Hospital' element, as ESNEFT covers the East Suffolk community nursing and other services post-merger.

This year has seen a change in the guidance around the reporting and performance management of *Clostridium difficile* cases. The total number of cases are reported as either a HOHA (Hospital onset, healthcare associated) or a COHA (Community onset, healthcare associated) case. Both are cases attributed to the organisation.

The objective for 2019/20 was to not exceed 107 cases of *C.diff* across ESNEFT. Part of this process included a judgement as to whether any of the cases could have been managed better and thus possibly prevented; "were there any direct lapse in care /breach in policy leading to CDI?". There were a total of 96 cases of hospital attributed *Clostridium difficile* disease; 12 of these cases were associated with a breach in key policy, the other 77 cases

received care with no breaches in policy. **Please note** – at the current time of publication, 7 of the 2019/20 cases are still awaiting a decision. The delay due to the commencement of work associated with the COVID-19 pandemic which began in January 2020.

There was one case of MRSA bacteraemia attributable to the Trust during the year against a target of zero. This was in a patient in Saxmundham ward at Ipswich Hospital in September. This case was investigated as a post infection review, as part of the contractual review process with CCG colleagues. The outcome was determined as non-avoidable due to the patient's health status and underlying conditions.

The IP&C team held one successful IP&C conference for nearly 100 local healthcare staff (doctors, nurses, healthcare scientists). Delegates attended from across ESNEFT and the wider health economy providers. This was the 18th annual conference at Colchester. The last annual conference at Ipswich was held in the previous financial year.

Key Achievements

- **Performance –** generally low levels of ***C difficile*** – 12 cases deemed as avoidable against a target of 107 (at the time of writing). One case of **MRSA bacteraemia** was identified across the Trust, this was assessed as non-avoidable. ***E coli*** **Bacteraemia –** numbers remain high in the community with hospital numbers proportionately lower, please see graphs.
- **'Governance'** – evidence that IP&C reporting is discussed and acted upon at divisional and departmental level. Good attendance and engagement by divisions through Infection Control Committee (ICC). Teams actively involve Infection Prevention and Control through the Accountability Framework.
- **Infection Prevention and Control policies and guidelines** – alignment of IP&C Policies across ESNEFT was completed for 10 out of the 13 related policies, this included the standardardisation of MRSA screening/management across ESNEFT.
- **Integrated computerised surveillance system –** the two hospital sites continue to run different versions of the same surveillance system to generate timely clinical reports supporting prompt action to manage IP&C. The upgrade of the Colchester site system has been temporarily delayed due to the pandemic.
- **Mandatory IP&C updates for all staff –** the overall percentage continues to be monitored monthly from the Training Portal.
- **Service provision–** The Consultant Microbiology team at Colchester has been depleted for some time, despite the recruitment of a Microbiologist in July 2019. One vacancy remains. An additional part-time Band 6 nurse was recruited to the Colchester Site, the nursing team saw two staff retire and one leave the organisation.

On-going work/plans for 2020/21

- To continue to provide expertise, advice and education for clinical teams during the COVID-19 pandemic situation and the recovery plan.
- To continue the trend of minimal number of patients with MRSA and *Clostridium difficile.*
- To assist with improved management of peripheral IV devices.
- To ensure all hospital acquired mandatory reportable organisms are investigated and reported nationally, and sharing lessons learnt locally.
- Continue to complete the Trust's MRSA action plan (as a result of the MRSA outbreaks in 2019/20).
- Reporting of new healthcare associated new isolates of MRSA in the monthly report.
- Re-establish peer review for Hand Hygiene audit.
- Re-establish programme of IP&C audit activity (annual ward audits suspended in March 2020).

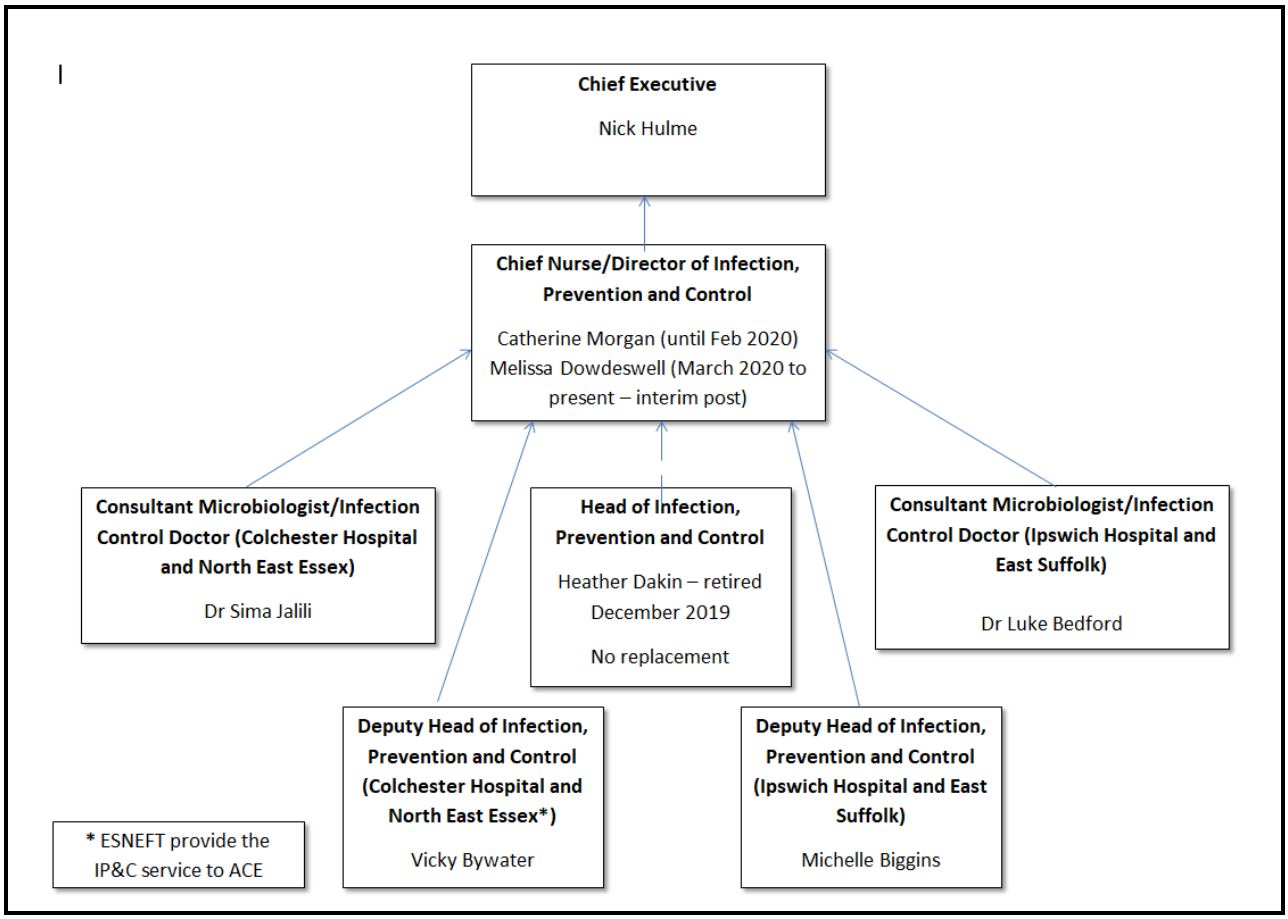
- Governance – to continue to embed IP&C throughout the organisation working closely with Clinical Leads/Teams
- Fulfil the education requirements for trust induction and ad hoc sessions.
- Continue to pursue ward refurbishment requirement, dependent on need/risk.
- Working with Estates and Facilities teams in the extensive investment in the Trust Estate across all locations
- Continue to provide IP&C service to contracts with our local healthcare provider partners including Anglia Community Enterprise (ACE) for next 12 months.
- Continue with work to improve visibility and support from IP&C service across all sites.
- To be part of the National IP&C community and support national programme vision to continually strive to reduce infection risks within our local health economy

Mrs Melissa Dowdeswell

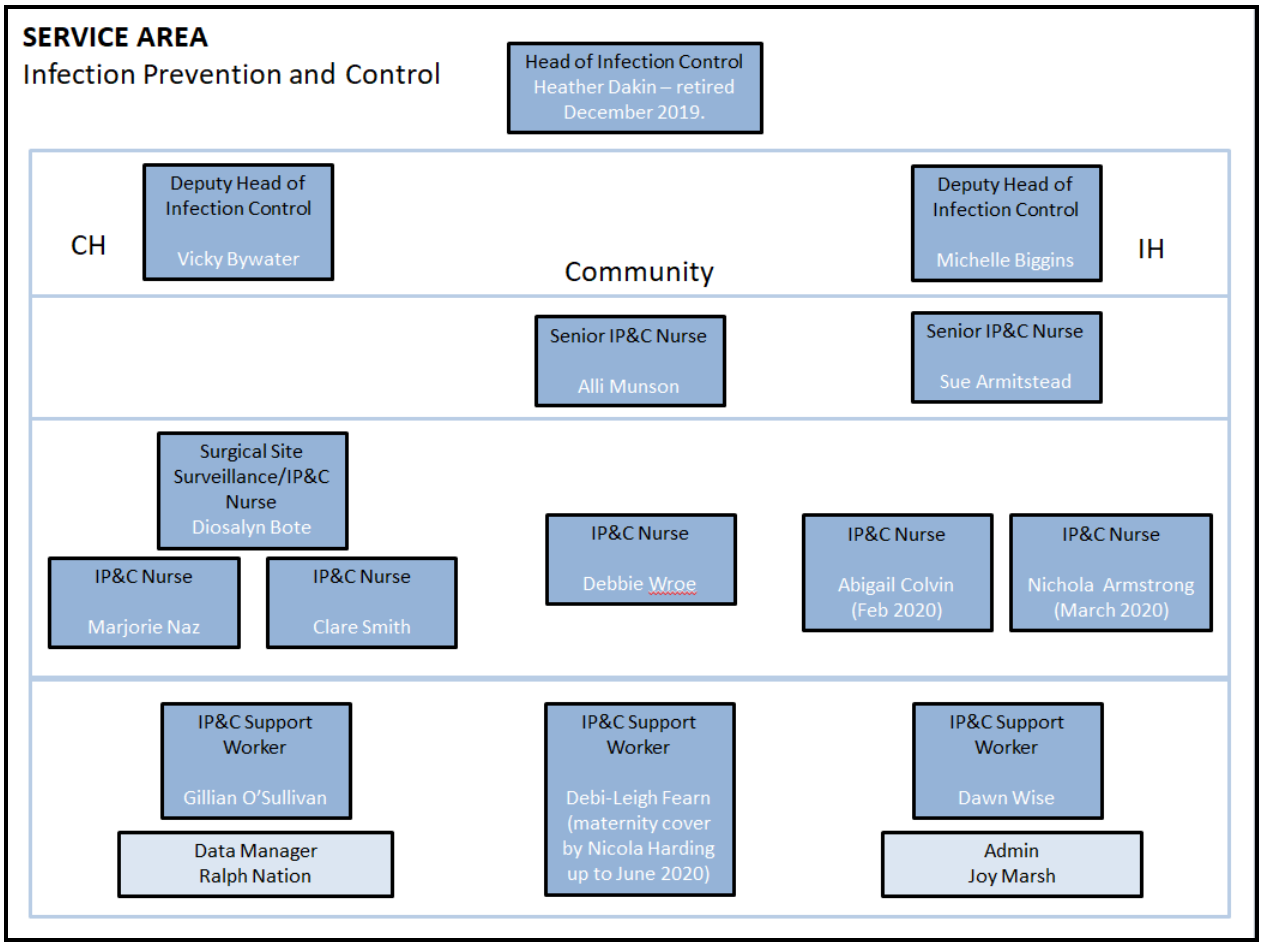
Director of Infection Prevention and
Control /Interim Chief Nurse ESNEFT

1. INFECTION PREVENTION & CONTROL TEAM ARRANGEMENTS
Organisational structure and reporting line to the Trust Board

The chart below demonstrates the lines of reporting within the Infection Prevention and Control service.



Infection Prevention and Control Team



In addition to the IP&C team, the Microbiologist service includes;

Dr Freda Sundram (commenced July 2019)
Consultant Microbiologist
North East Essex Community and Colchester Hospital

Dr Phillippa King (on Maternity leave from January 2020 – no mat cover provision)
Microbiology Registrar
North East Essex Community and Colchester Hospital

Dr Gillian Urwin
Consultant Microbiologist
East Suffolk Community and Ipswich Hospital

Dr Beverly Palmer
Consultant Microbiologist/Antimicrobial Microbiology Lead
East Suffolk Community and Ipswich Hospital

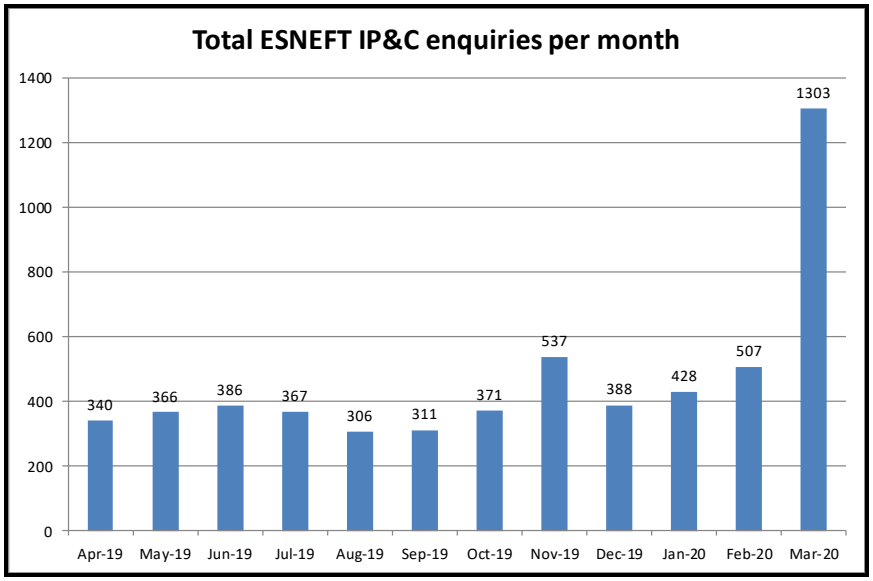
Infection Prevention and Control Team Activities
Members of the team are involved in the following committees/meetings:

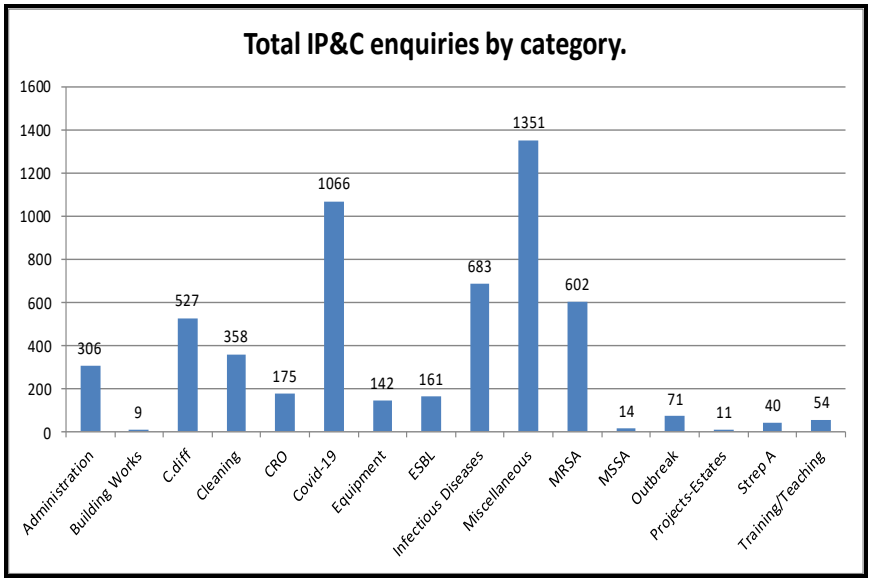
Infection Prevention & Control Team Meetings
Infection Control Committee
Matron and Ward Sisters Meetings
Service review meetings for facilities management
Facilities Contract review Meetings Monthly (IH site)
Patient Safety and Experience Group
Safer Sharps Group
Antimicrobial Stewardship Group
CCG Contract Review Meeting
COVID-19 Tactical Meetings
COVID-19 Clinical Reference Group meetings
Decontamination Committee
Water Safety Group
Operational Water Group (CH)

The Director of Infection Prevention and Control attends and reports to the following;
ESNEFT Infection Control Committee, Quality and Patient Safety Assurance Committee, PEG, Trust Board.

Infection Prevention and Control Enquiries
The number of hospital enquiries to the IP&C team captured continues to increase year on year, some of these enquiries may be dealt with quickly whilst others can lead to a major piece of project work. The three main themes are MRSA, diarrhoea and vomiting (D&V) and infectious diseases**.** The COVID-19 pandemic enquiries caused an almost 3-fold increase in telephone calls in March.

What must be remembered is that the data does not capture all of the enquiries and work generated within the Teams, however, it does assist in focusing where and what is required to plan for teaching and support for the year ahead.





Please note; COVID-19 related enquiries were not classified individually initially and were marked as 'miscellaneous' therefore the number of COVID-19 enquiries may be significantly higher.

Infection Control Committee

The first joint ESNEFT committee meeting was held in August 2018, terms of reference were reviewed, and it was agreed for the first year the Committee would meet monthly with the meeting venue being located on each site alternately with dial facilities to allow cross-site engagement. Throughout the 2019/20 period meetings have continued on a monthly basis. The advent of COVID-19 led to focused COVID-19 meeting in March 2020, rather than a usual scheduled agenda given the circumstances.

Attendance is as follows:

	Meeting Dates 2019-20											
		Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Jan-20	Feb-20	Mar-20
Catherine Morgan/Melissa Dowdeswell	Director of IP&C/Chief Nurse	Apologies	Apologies	Apologies	✓		✓	✓	✓	✓	✓	✓
Kay Hamilton	Deputy Chief Nurse											✓
Rebecca Pulford	Associate Director of Nursing			Apologies	Apologies							
Claire Thompson	Site Director of Nursing (Ipswich)	✓	Apologies	✓	✓							
Anne Rutland	Associate Director of Clinical Governance								✓	Apologies	Apologies	Apologies
Jane Bazzali	Public Health England Infection Control Nurse (PHE)	Apologies	Apologies	✓	Apologies		Apologies	✓				
Tracy Sharpe	Senior Health Protection Nurse (PHE)	✓	✓	Apologies	✓			✓	✓			
Julia Shields	IP&C Nurse Specialist, CCG	Apologies	✓	Apologies	✓		Apologies	✓	✓	✓	✓	Apologies
Margaret Grant/Pauline Farrow	Head of Occupational Health			Apologies	Apologies		✓					✓
Shaun Jackson	Head of Estates	Apologies	✓	Apologies	Apologies							
Dan Fenton	Estates & Facilities									✓	Apologies	Apologies
Martin Scannell	Facilities Contract Manager	✓										
James Milner	Compliance Manager, Estates & Facilities	✓	✓		✓		✓	✓	✓	Apologies		
Fiona Sparrow	Head of Facilities	✓	✓	✓	✓		Apologies	✓	✓	✓	✓	Apologies
Daniel Imoh	Decontamination Lead	✓	✓	✓	✓		✓	✓		✓	✓	✓
Heather Dakin	Head of IP&C	Apologies	✓	✓	✓		✓	✓	✓	Left the Trust		
Michelle Biggins	Deputy Head of IP&C (Ipswich)	✓	Apologies	✓	✓		✓	Apologies	✓	✓	✓	✓
Vicky Bywater	Deputy Head of IP&C (Colchester)	✓	✓	✓	✓		✓	✓	✓	✓	✓	Apologies
Marge Naz/	Infection Control Nurse		✓									
Holly Glissing/Chris Holman	Antimicrobial Pharmacist	✓	✓	✓	Apologies		✓	Apologies	Apologies	✓	Apologies	✓
Sima Jali	Consultant Microbiologist/Infection Control Doctor (CGH)	✓	✓	✓	✓		Apologies	✓	✓	✓	✓	Apologies
Luke Bedford	Consultant Microbiologist/Infection Control Doctor (IH)	✓	✓	✓	✓		✓	✓	✓	✓		✓
Sarah Smith/Gail Jenkins	Head of Nursing & Clinical Services Women & Children & Clinical Support		Apologies	✓	✓		✓	✓	✓	✓	✓	Apologies
Dee Macey	Head of Midwifery (CGH)		Apologies					Apologies	Apologies	Apologies	Apologies	Apologies
Justina Skonieczny	Maternity Matron										✓	Apologies
Kate Taylor	Deputy ADoN Speciality Medicine		✓	✓	✓				Apologies	Apologies	Apologies	Apologies
Lynda Kitching	Matron - Logistics & Outpatients	✓	✓						✓	Apologies	Apologies	Apologies
Emma Sweeney	ADoN Medicine	✓	✓	✓	✓				✓	✓	Apologies	Apologies
Becky May	Senior Matron - Medicine						✓		✓	✓	Apologies	✓
Tash Tuck	Matron - ED							✓				
Saran Evans	ADoN Cancer & Diagnostics	✓	✓	Apologies	Apologies							✓
Tina Leppard	Matron - Cancer			✓	Apologies				✓	✓	✓	Apologies
Leslie Sheen	Cancer Services							✓	Apologies	Apologies	Apologies	Apologies
Kay Hamilton/ Sara Impecati	ADoN Surgery	✓	✓	✓	✓		✓	✓				
Hannah English	Senior Matron - Surgery	✓	✓	✓	✓		Apologies	Apologies	✓	✓	Apologies	Apologies
Lindsey Mazur	Matron - Surgery			Apologies	Apologies							
Kay Hamilton	ADoN Specialist Surgery						✓	✓	✓	✓	✓	
Rebecca Pulford/Paula Lightfoot	ADoN/HoN Integrated Pathways	✓					✓	✓	✓	Apologies	Apologies	Apologies
Maureen Govere/Paula Shean	Matron - Integrated Pathways		✓		✓					✓	Apologies	Apologies
Darren Evans	Matron - General & Elderly Medicine										✓	Apologies
	ADoN MSK & Specialist Medicine											
Kelly Ward	Community Matron						Apologies	Apologies	Apologies	Apologies	Apologies	Apologies
Cliff Oakley	Patient Governor		✓									
Joy Marsh/Lisa Tomlins	Team Secretary IP&C Minute Taker	✓	✓	✓	✓		✓	✓	✓	Apologies	✓	✓
Carrie-Ann Cruikshank										✓		
Jo Willis	PA to Interim Chief Nurse, Interim Deputy Chief Nurse, Associate Director of Clinical Governance & Head of Infection Control											✓

√ indicates attendance.

3. DIPC REPORTS TO THE TRUST BOARD – SUMMARY

The DIPC reported monthly to the Quality and Patient Safety Assurance Committee, which itself reports monthly to the Trust board

Outbreak reports

MRSA

The main focus of outbreaks for the period 2019/2020 was centred at the Ipswich and Felixstowe Hospitals, where from May 2019 to January 2020 there were 6 outbreaks of MRSA that occurred. These were all escalated as per the Outbreak Policy, with appropriate outbreak meetings occurring and actions being monitored. The CCG and PHE were invited to all outbreak meetings, and a subsequent Trust MRSA action plan was devised and is monitored by the CCG. This plan is currently on hold as the pandemic situation progressed in March 2020.

Essential actions included; the development and implementation of the ESNEFT MRSA policy that saw a change in procedure for Ipswich Hospital returning to screening all non-elective admissions. Work to reduce the number of reusable items of patient equipment in preference for single patient use, and the conversion to a different alcohol hand sanitiser. Escalation of the need for ward refurbishment, and the risk register entry for the lack of a decant facility to aid this process.

Ipswich and East Suffolk – MRSA outbreaks				
Date	**Ward**	**Closures**	**Number of days ward affected**	**Cases confirmed**
7.5.2019 – 8.7.2019	**Shotley**	**Ward**	**62 days**	**11**
28.6.2019- 29.7.2019	**Claydon**	**Ward**	**31 days**	**4**
9.9.2019 - 5.11.2019	**Saxmundham**	**Ward**	**57 days**	**4**
15.11.2019 –27.12.2019	**Sproughton**	**Ward**	**42 days**	**5**
9.12.2019 – 10.2.2020	**Croydon Unit, Felixstowe**	**Ward**	**63 days**	**11**
24.01.2020 - 30.1.2020	**Woodbridge**	**Partial Ward (H bay implicated)**	**6 days**	**4**

Environment sampling was conducted in the cases of on Shotley, the Croydon Unit and Woodbridge.

Ward	Samples MRSA positive	Comments and actions
Shotley	**Ward desk**	**Desk underwent extensive cleaning. Escalation of need to refurbish the area.**
Croydon Unit	**Keyboard**	**All keyboards were disposed of and replaced. A cleaning schedule was put in place.**
Woodbridge	**Bedspace suction unit**	**This equipment was disposed of, all suction equipment was cleaned, and disposable items replaced.**

Viral Gastroenteritis

It is expected that there could be outbreaks of viral gastroenteritis over the winter months. Depending on the scale of the flu season, outbreaks of influenza can also occur. During 2019/20 season, there were no outbreak of influenza. Details of the outbreaks of viral gastroenteritis are provided in the table below. The Trust saw fewer outbreaks of norovirus than experienced in other years.

Ipswich and East Suffolk				
Date	**Ward**	**Number of bays, ward closed**	**Number of days ward affected**	**Cases confirmed by PCR**
11.11.19	**Grundisburgh**	**Ward**	**10**	**Yes**
12.11.19	**Waveney**	**2**	**9**	**Yes**
17.11.19	**Haughley**	**1**	**7**	**Yes**
19.11.19	**Debenham**	**1**	**<7**	**No**
19.11.19	**Kesgrave**	**Ward**	**10**	**Yes**
21.11.19	**Kirton**	**1**	**5**	**No**
Colchester				
Date	**Ward**	**Number of bays, ward**	**Number of days ward affected**	**Cases confirmed by PCR**

		closed		
25.11.19	**Tiptree**	**1**	**12**	**Yes**
25.11.19	**Peldon**	**2**	**6**	**Yes**
	Peldon	**1**	**2**	
25.11.19	**Layer Marney**	**1**	**2**	**Yes**
		2	**1**	
		Ward	**6**	
		1	**3**	
01.12.19	**Darcy**	**1**	**4**	**Yes**
14.12.19	**Layer Marney**	**Ward**	**6**	**Yes**
		2	**3**	
		1	**8**	
27.12.19	**Stroke Unit**	**1**	**9**	**Yes**
06.01.20	**D'arcy**	**Ward**	**1**	**Yes**
		3	**3**	
		2	**4**	
		1	**1**	

Actions taken

- Wards visited daily by Infection Prevention and Control Nurse and daily management plan agreed with the ward and site team
- Decision to close bay or ward agreed by Infection Prevention and Control team
- Increased and enhanced environmental and equipment cleaning was put into place
- Cohort nursing/care managed as required
- Winter planning included additional IP&C training sessions, which have been running for the last 2 years.
- Outbreak folders are in place in all ward areas, these were checked and updated to ensure ward teams have all the information they require to document and escalate an outbreak

COVID-19 Pandemic

The global pandemic of COVID-19 involved the IP&C team from January 2020 when preparations were made to test travellers from abroad. The IP&C nurses assisted with the setup of screening pods at the Ipswich, Colchester and Hartismere hospital sites, actively undertaking screening and managing the reporting of results to members of public screened.

The first confirmed case at Colchester was on 9th March, and at Ipswich on 10th March 2020. There were a total of 201 COVID-19 positive cases up to the end of March 2020.

Throughout the pandemic period the IP&C team have been actively engaged with reviewing and interpreting national guidance from Public Health England, engaging with relevant teams, writing local processes, attending relevant pandemic management meetings, educating staff, answering enquiries and providing support to a wide proportion of hospital staff.

Carbapenem-resistant Organisms (CRO)

There were no outbreaks of CRO. However, Langham ward was closed following a case of a NDM CRO case. Enhanced surveillance of CRO screening was undertaken which led to the identification of a second case. It was concluded that the two cases were unrelated as they were different organisms. The ward reopened and there was no further action.

Estates and Planning

The IP&C team have continued to support and provide advice relating to building projects, and schemes to develop or create facilities and services, including two full ward refurbishments during the year.

Including:

- The inception of services from The Essex County Hospital into the PCC building.
- ED reconfiguration and formation of an urgent treatment centre on the Colchester Hospital site.
- Extension to the front of the Colchester Hospital.
- Somersham Ward refurbishment at the Ipswich Hospital.
- Both hospital mortuary departments.
- The Collingwood Centre (Chemotherapy suite and Haematology lounge) at the Colchester site.
- Work commenced on a new interventional radiology and cardiac angiography suite, and a new aseptic department for Pharmacy.
- Due to the COVID-19 pandemic, PODS were created on both sites for the purposes of assessment and screening of symptomatic travellers.

IP&C audits include flagging estates issues, which often lead to remedial works occurring to improve the state of the environment, primarily to improve the effectiveness of maintaining a clean environment.

Water Safety Management

Overview
The primary water safety risks affecting hospital sites with respect to Infection Prevention and Control are colonisation of water supply pipework by Legionella and *Pseudomonas aeruginosa* bacteria.

1. **Water Safety Group**

The Trust has a comprehensive management system in place to minimise these risks and to allow action to be taken when these bacteria are detected. This is overseen and delivered by the **Water Safety Group** (**WSG**), which meets quarterly and includes representation from Estates, Facilities and Infection Prevention & Control. The WSG maintains the Trust's Water Policy and implements the Water Safety Plan. The Trust's Authorising Engineer (Water) attends and provides independent and impartial technical guidance as well as auditing the Group's activities.
There is now a single WSG covering all of ESNEFT and underneath this, there are individual Operational Water Groups (OWGs) at both Colchester and Ipswich Hospitals which meet monthly and report into the WSG.

Community
There are also additional Water Safety Groups covering certain community sites where ESNEFT does not manage the buildings, including the Colchester Primary Care Centre and

Harwich. These feed into the Trust WSG. Good progress has been made to ensure coverage of Community sites by appropriate water safety groups, however, there are still area's that require developing in 2020-2021.

Risk Assessments

A programme of Water Risk Assessments is carried out for all areas. The Trust has a programme for implementing remedial actions (e.g. removal of pipework dead-legs) to be carried out in 2020-2021.

2. Control Measures

Temperature

The primary control measure used against L. and P. is **water temperature**. Hot water is stored and distributed at a sufficiently high temperature to kill the bacteria while cold water is distributed at a suitably cold temperature to prevent significant multiplication.

A regime of **temperature monitoring** is carried out to ensure the correct temperatures are being maintained. Where temperatures are detected outside of the required limits (e.g. due to plant failure), Estates jobs are raised to correct the issues and tracked via the job management systems.

Chlorine Dioxide Treatment

At Ipswich Hospital only, ClO_2 is used (in addition to temperature) as a secondary control measure. This reflects greater difficulties achieving the required temperatures in older pipework and distribution systems. The ClO_2 system proves effective and few positive microbiological samples are returned.

At Colchester Hospital, a ClO_2 system has recently been installed within Gainsborough's plant room that serves Gainsborough and Collingwood following issues with Legionella and formed part of the remedial action. A feasibility report is currently underway to bring in site wide ClO_2 plant, with a view to having this in by the end of the year.

Other control measures

Other control measures include:

- **Flushing of little-used outlets** to prevent stagnation. L8Guard is currently used at Ipswich Hospital and is a shared responsibility of which clinical teams have a significant contribution. This will be rolled out across Colchester Hospital to allow flushing to be tracked more effectively.
- Annual **inspection of cold water tanks**. Cleaning and disinfection is then carried out where required.
- Annual inspection and cleaning of domestic hot water (DHW) generating plant.
- Shower head replacement

Control measures during COVID-19

Following the outbreak of COVID-19 within the UK, we have seen a significant increase in vacant areas across the estate and have implemented additional flushing of outlets across these areas ensuring water safety is maintained throughout and when these become reinstated for use by the Trust. There are also units leased out by others within ESNEFT properties which are also vacant with both IH and CH Estates teams assisting with the same processes. Whilst in COVID-19 suspected areas our operatives are following strict Estates and IPC guidance when carrying out these routine works ensuring not only the health and safety of themselves but others also.

3. Microbiological Sampling

Periodic **sampling** is carried out for L. (quarterly) and P. aeruginosa (6-monthly) in areas with high-risk / augmented care patients. The control measures outlined above should not allow L. and P. aeruginosa to proliferate in the system, but sampling provides assurance that the control measures are working.

At Colchester Hospital the sampling regime was overhauled and expanded in early 2018 to match it correctly to all Augmented Care areas. This revealed a significant pattern of positive P. aeruginosa samples in West Bergholt Ward.

All other areas since then have returned negligible or isolated positive samples which were addressed and cleared.

In late 2019 the sampling regime was extended to include the Collingwood centre as part of another Augmented Care area at Colchester Hospital. This flagged a pattern of Positive Legionella samples and upon further samples taken within Gainsborough, highlighted we had an issue that required immediate action.

Wider Sampling for Legionella at both sites produced only very localised and/or low counts which were addressed and cleared.

West Bergholt Ward

In May 2018 a substantial proportion of outlets sampled in West Bergholt returned positive results for P. aeruginosa, many greater than 100 cfu/l.

Figure 1 - West Bergholt pattern after multiple rounds of remedial actions (Mar 2019)

Making safe

To make this safe, WRAS-approved point-of-use filters were installed on all basins and showers and have been regularly replaced as per manufacturers' guidelines, allowing outlets to continue to be used and avoiding stagnation.

Addressing the issue

To address the issue a new risk assessment was carried out and a number of engineering issues identified with guidance from the AE which have been addressed including:

- poor DHW circulation — addressed with new pump and balancing valves
- use of flexible hoses — replaced with hard piping
- inappropriate 'short circuit' layout — circuit restored
- Shower TMV valves scaled — TMVs serviced and disinfected
- non-used basins — removed
- pipework dead legs — removed

Behavioural issues were also addressed including the use of basins to dispose of patient wash water – rather than sluices. Little-used outlets were identified and flushing regimes introduced.
The system has been regularly re-sampled to track the pattern but similar numbers of positive results persisted. The system was then shock-dosed (June 2019) to clear the bacteria. The engineering fixes have made it difficult for bacteria to become re-established with this being proved by the re-occurring negative samples being taken and will be closed off in June 2020 which is when the last sampling is due to take place confirming this.

Clinical link

The WSG has cross-referenced the positive samples in West Bergholt to the pattern of patient P. aeruginosa infections and found no correlation, indicating the effectiveness of the point-of-use filters, but this will continue to be monitored carefully. This episode has illustrated the issues and expense that can result from inappropriate design and installation and usage of water systems.

Collingwood and Gainsborough

In late 2019 as part of an updated augmented care area sampling regime, Collingwood was added to the list and was sampled for L. and P. Aeruginosa. Test results showed positive samples for L. with actions to sample Gainsborough to confirm if this was a local issue or had spread due to both being on the same system. Test results for Gainsborough returned as positive leading to actions being taken firstly to make safe.

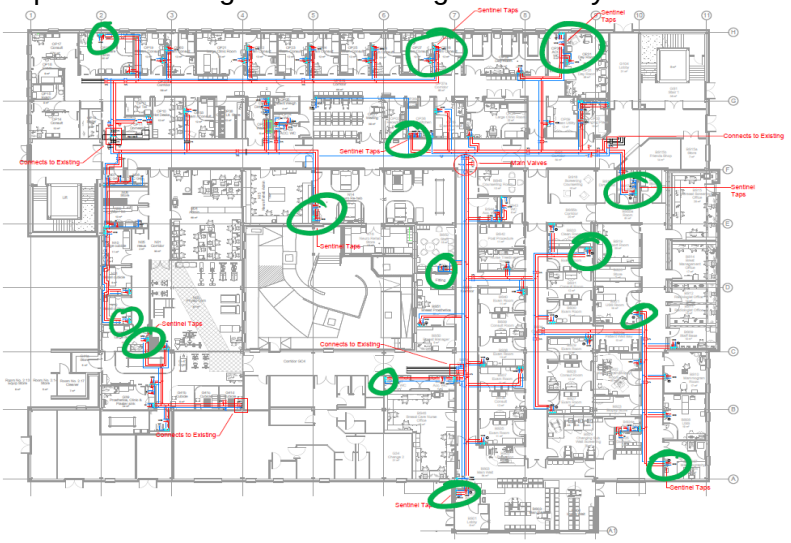


Figure 2 – Gainsborough Domestic Hot water schematic drawing as part of remedial action program.

Making safe

To make this safe, WRAS-approved point-of-use filters were installed on all basins and showers and have been regularly replaced as per manufacturers' guidelines, allowing outlets to continue to be used and avoiding stagnation.

Addressing the issue

To address the issue a new risk assessment was carried out and a number of engineering issues identified with guidance from the AE which have been addressed including:

- Installation of Main branch Hot water return regulating valves
- Installation of every outlet Hot water return regulating valves
- Installation of additional Hot water expansion vessel
- Installation of ClO_2 dosing plant
- Over 300 Thermostatic mixing valves cleaned and serviced

- Removal of dead legs within system
- Replacement of old copper piping serving some area's
- Replacement of Taps

The system has now been pasteurised multiple times and was re sampled at the end of May 2020 which we expecting to see following extensive control measurements and remedial actions taken negative results for L. Results are due mid-June 2020 which will be monitored and any further actions required will be taken to fully resolve.

Clinical link

The WSG has cross-referenced the positive samples in Collingwood and Gainsborough to the pattern of patient L. infections and found no correlation, indicating the effectiveness of the point-of-use filters, but this will continue to be monitored carefully. This episode has illustrated the issues and expense that can result from inappropriate design, installation and usage of water systems.

Key priorities for 2020-2021

- Definitively clear West Bergholt of P. aeruginosa to allow a return to normal operation
- Definitively clear Gainsborough and Collingwood centre Legionella to allow a return to normal operation
- Comprehensive progress on the Risk Assessment programme to tackle engineering issues **before** bacteriological issues arise. To be tracked numerically at WSG
- Rigorous design standards to ensure new areas get the design right first time
- Colchester Hospital site wide roll out of ClO_2 treatment plant
- Roll out L8Guard across Colchester Hospital providing training / awareness to ensure effective flushing and ownership.
- Implement AE Audit recommendations
- Implementation of additional AP's across the Estate

4. BUDGET ALLOCATION TO INFECTION PREVENTION & CONTROL ACTIVITIES

Annual Infection Prevention and Control Budget

There was an under-spend at year end of £27,000.

The under-spend was primarily due to time gaps in recruitment of a Band 6 nurse, and the Head of Infection Prevention and Control post.

Staff

The team has seen the departure of three team members; 2 retired and 1 left the team. There are two new band 6 nurses that have joined the Ipswich team. Maternity cover for the IPC support worker in the community part of the team has been fulfilled. A part time band 6 position was created and recruited to in the Colchester team.

There remains understaffing within the Microbiologist cover for Colchester Hospital.

Training and development opportunities for IP&C team 2019/20

The Public Health England Surgical Site Infection Surveillance training day was attended by one team member – CS.

Education continued at Greenwich University for AM, who completed two modules entitled Quality Systems Management and Governance, and Risk Management.

Two team members were supported to complete MSc programme pathways – SA and MB.

The team's Data Manager is completing Level 4 Data Analyst Apprenticeship course – RN.

The aim of this training is to support succession planning in the delivery of the service across the evolving organisation.

Training requirements for the Team in the coming year 2020/2021

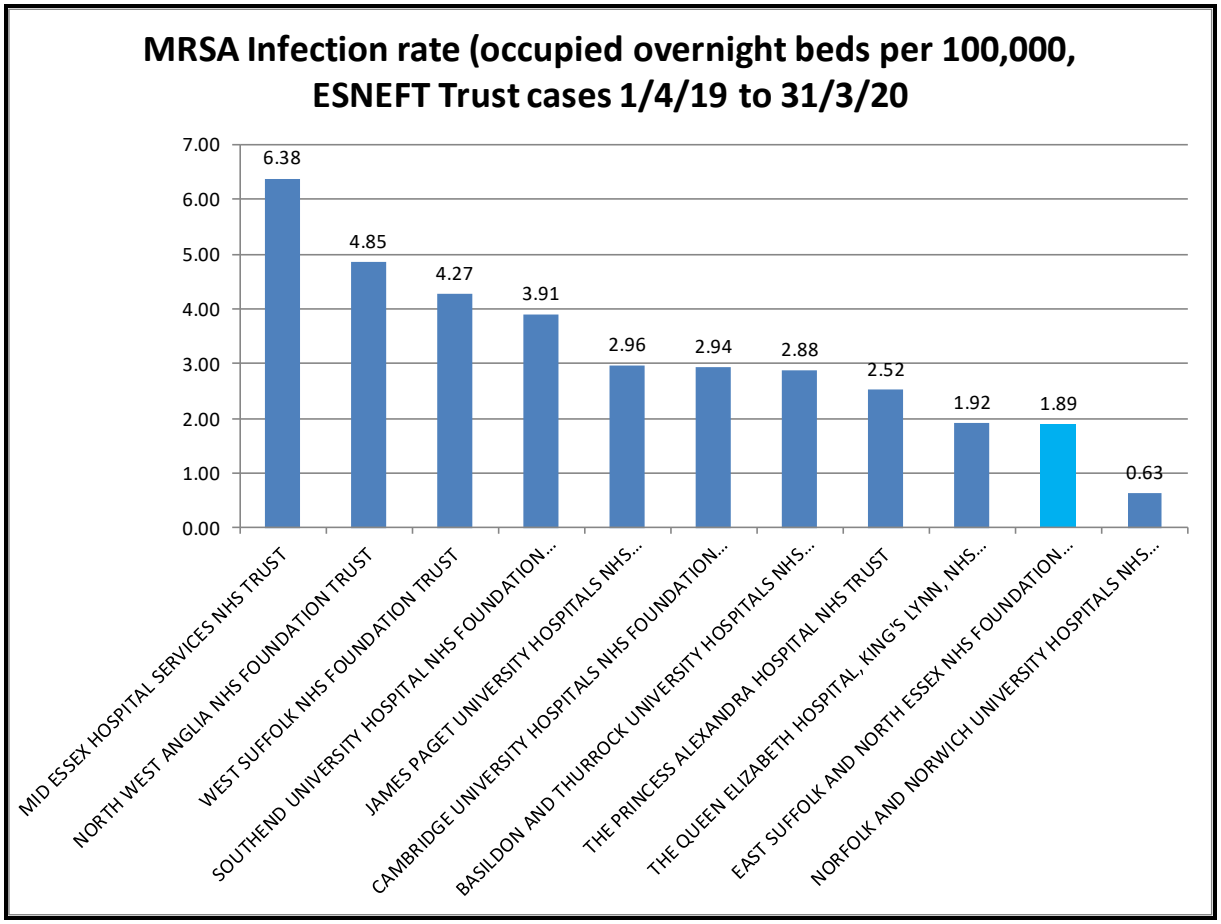
Education bids had been put forward for one module in MSc Biomedical Sciences – via Greenwich University for the completion of a dissertation module for AM.

Infection prevention and control specialists remain difficult to find and it is important that the Trust develops its own team to high standards. The team has been successful in recruiting staff, other than the Head of IP&C position, therefore training is imperative to ensure these new staff become trained Infection Prevention and Control personnel for succession planning.

5. HCAI statistics

MRSA bacteraemia

The following graph shows the MRSA rate, occupied overnight beds per 100,000 1/4/19 to 31/3/20, for hospital onset cases of MRSA bacteraemia, compared to other East of England organisations.



MRSA bacteraemia 1 case apportioned to ESNEFT in 2019/20

MRSA incidence is assessed as an infection acquired in hospital if detected at day 3 onwards from admission. There is a national zero tolerance target for cases of MRSA bacteraemia.

There was one hospital-apportioned cases in a patient at Ipswich Hospital in September. The patient had contributing risk factors for the acquisition of MRSA. Following a post infection review this case was deemed as non-avoidable although there was learning around the care of peripheral cannula care. A subsequent audit of peripheral cannula care demonstrated good compliance. The case was on Saxmundham Ward and occurred at the time the ward had an outbreak of MRSA.

Clostridium difficile

Clostridium difficile infection (CDI) remains an unpleasant, and potentially severe or fatal infection that occurs mainly in the elderly or other vulnerable groups especially those who have been exposed to antibiotic treatments.

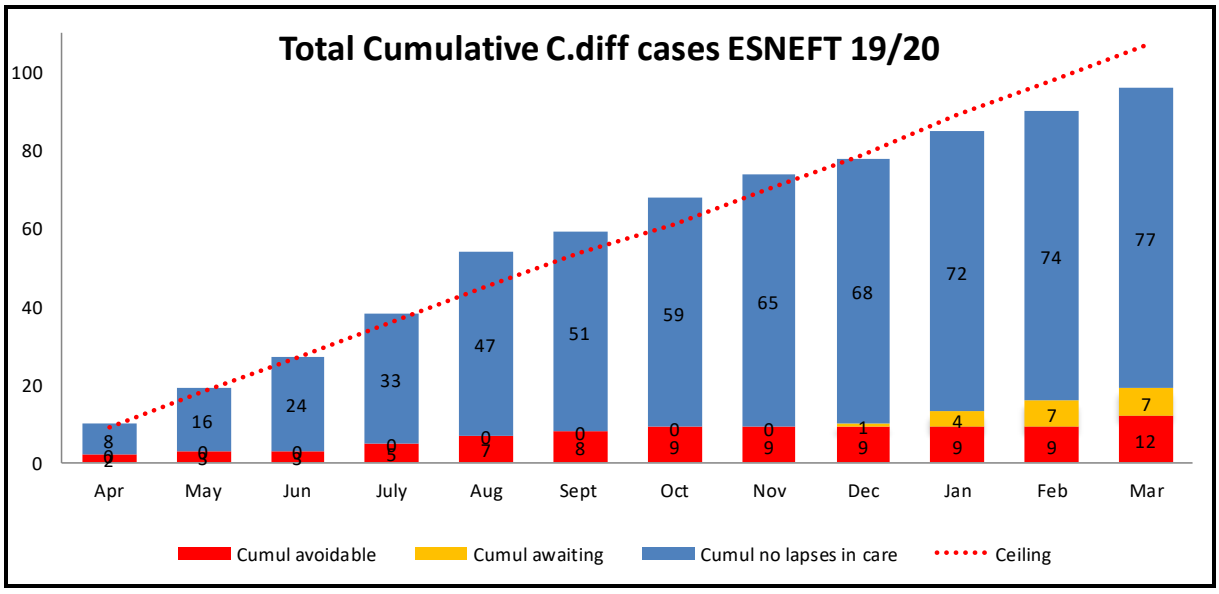
The Trust has made great strides in reducing the number of people affected by CDI over the last few years. Each case identified in the Trust is subject to post infection review. If all care and treatment is managed within nationally and locally recognised policy, the panel review group may agree that it is deemed as a breach.

From April 2019, *Clostridium difficile* cases reported to the healthcare associated infection data capture system were assigned as follows:

- **hospital onset healthcare associated (HOHA):** cases that are detected in the hospital three or more days after admission
- **community onset healthcare associated (COHA):** cases that occur in the community (or within two days of admission) when the patient has been an inpatient in the trust reporting the case in the previous four weeks

The agreed maximum ceiling of cases for ESNEFT was 107, there was no trajectory limit set in this period, just the total number of cases. Of the 96 cases reported, there were 12 cases with breaches and 77 cases with no breaches across all sites (note that as this was written there are still 7 cases awaiting a decision, delay due to the CCG pausing the process in light of the pandemic).

A low number of cases is testament to the vigilance of clinical teams and their compliance with best practice. However, there continues to be work relating to antimicrobial prescribing and timely isolation which is required.



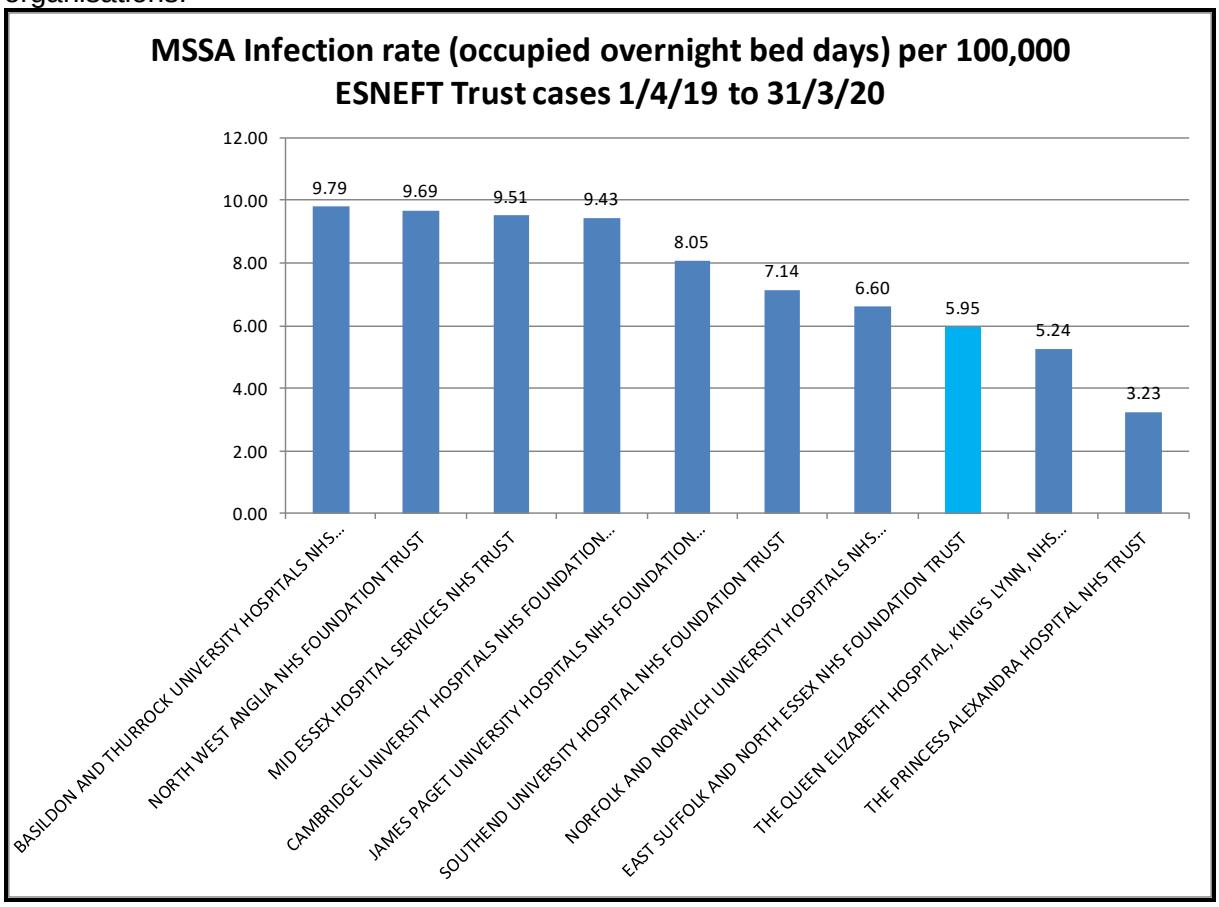
- Patients determined with *C.diff* infection are monitored closely by the IP&C team. *C.diff* ward rounds are conducted with an IP&C nurse and Consultant Microbiologist, to aid the management of patients with advice and monitoring of care.
- The IP&C team support clinical teams to investigate cases and prepare for the panel review process.
- Outcomes of *C.diff* infection and learning is shared at the ICC to collate and disseminate learning themes to influence changes in practice, both within the hospital and the wider community e.g. with appropriate antibiotic prescribing, to further reduce cases.
- Continue to investigate and invest in new cleaning technologies supporting best practice and efficiency including the use of hydrogen peroxide vapour (HPV) fogging, and UV technologies.
- The importance of keeping the bio-burden of *C.diff* and other organisms in the clinical environment remains high on the IP&C agenda.

Created: May 2020
Review: 2021
Author: Melissa Dowdeswell (Interim Director of Infection Prevention & Control/ Chief Nurse)

Meticillin Sensitive *Staphylococcus aureus* Bacteraemia

Staphylococcus aureus

The following graph shows the MSSA rate, occupied overnight beds per 100,000 1/4/19 to 31/3/20, for hospital onset cases of MSSA bacteraemia, compared to other East of England organisations.



All hospital-associated cases of MSSA are investigated and any learning identified shared. Most commonly, IV devices can be a contributory factor in the acquisition of a MSSA bacteraemia. Cases related to IV care is addressed with the ward concerned, and IP&C support education and audit to improve standards. As a skin commensal in approximately a third of the population, this sensitive strain of *S.aureus*, is not difficult to treat. There remains no nationally agreed target reduction for MSSA bacteraemia cases.

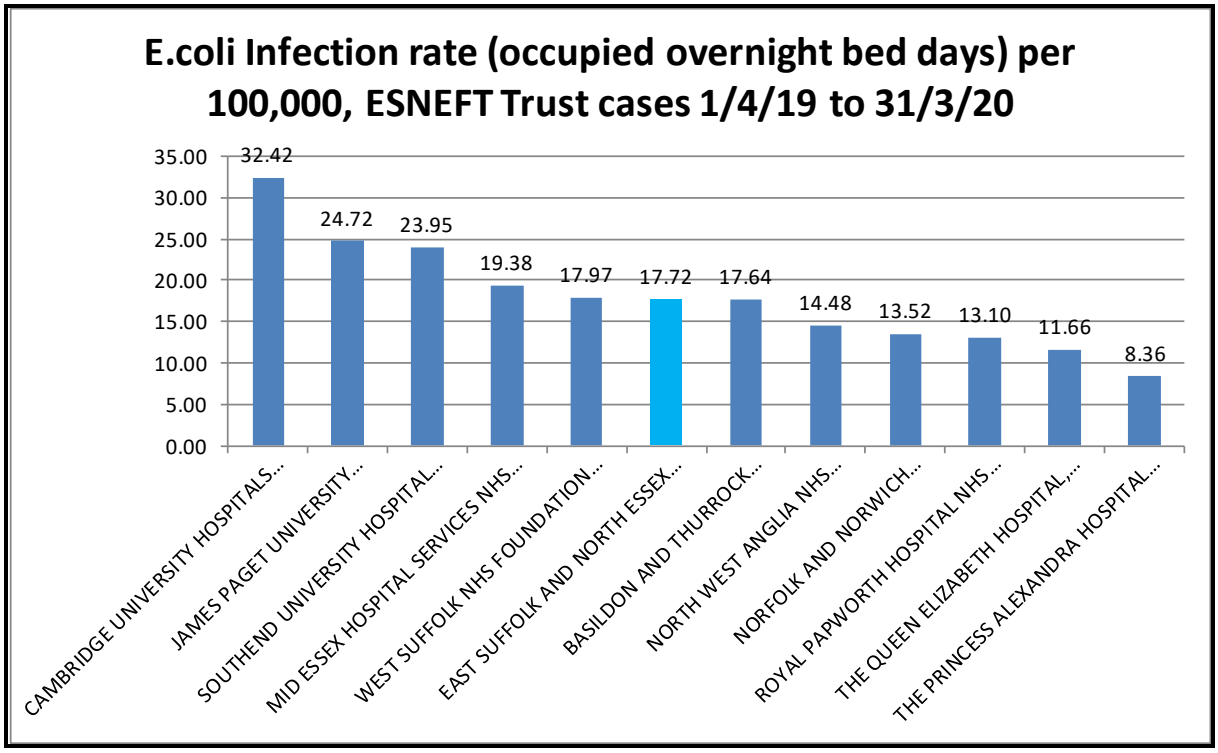
Carbapenem Resistant Organisms (CRO's)

The national guidance on screening for CRO continued to be followed. A national review of the screening of CROs was conducted, however to date this has not been published to affect a change in local policy.

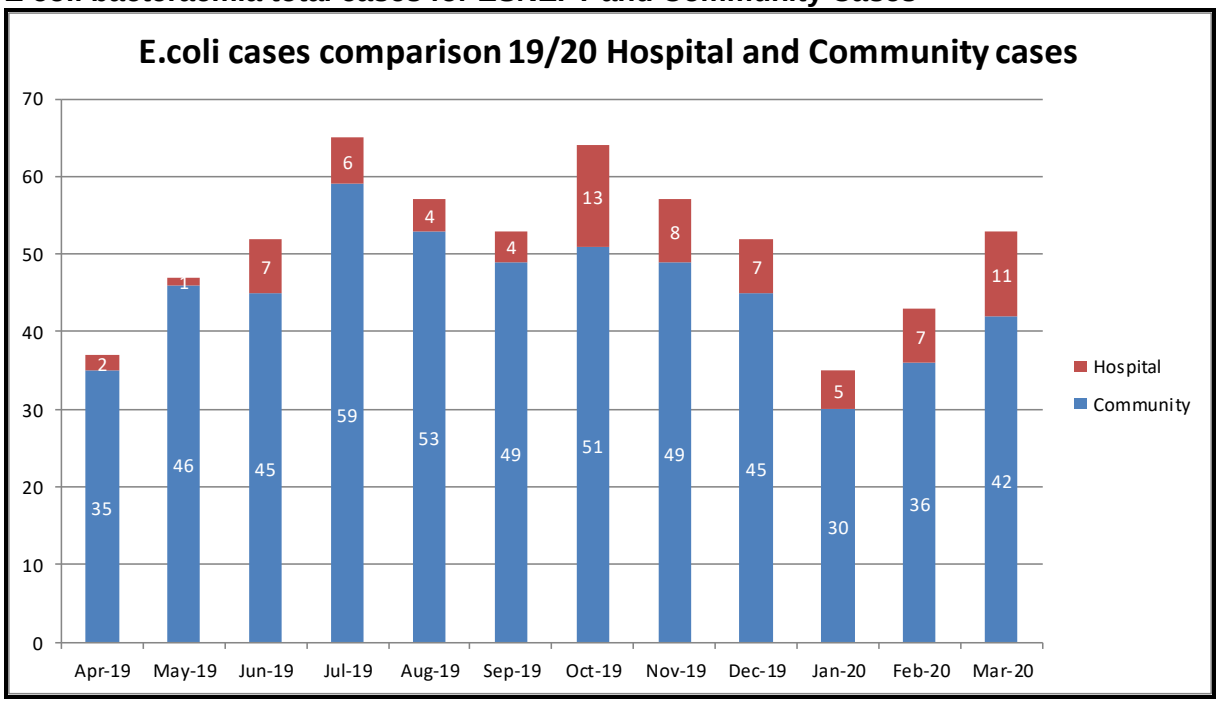
The IP&C team actively promote the screening policy for CRO to ensure compliance to mitigate risks of CRO within a hospital environment.

***Escherichia coli* (*E.coli*) bacteraemia**

The following graph shows the rate, occupied overnight beds per 100,000 1/4/19 to 31/3/20, for hospital onset cases of *E.coli* bacteraemia, compared to other East of England organisations.



E coli bacteraemia total cases for ESNEFT and Community Cases



Created: May 2020
Review: 2021
Author: Melissa Dowdeswell (Interim Director of Infection Prevention & Control/ Chief Nurse)

Locally, it continues to be recognised that the majority of *E.coli* bacteraemia occur in the elderly population in the community setting who then present to our hospitals. The proportion of community cases remains consistent in this year as previously in 2018/19; 88% versus 12% attributed as ESNEFT cases. National levels describe a range of 65-80%, therefore within East Suffolk and North Essex communities there is a slightly higher number of community cases.

The NHS long-term plan is to reduce cases of gram-negative bacteraemia (this includes *E.coli*) by 50% by 2024/25. This is a plan that has changed over the last few years, and the timescale lengthened. There has been limited progress with cross economy working, this period, as the CCG and the trust have focused on the other outbreaks that occurred over the year.

Surveillance

ICNet Surveillance System

ICNet

Surgery	National Benchmark	Apr-Jun 2019	Jul-Sep 2019	Oct-Dec 2019	Jan-March 2020

surveillance system is used extensively on both Acute hospital sites and provides the Infection Prevention and Control team and the Trust with tools to support the effective monitoring and management of HCAI's. Imports of results data from the laboratory systems allows the IPCN's to advise ward teams in a timely fashion and ensure the safe management of the infectious patient.

The system at Colchester site is currently being upgraded to the new 'NG' system (currently also in use at Ipswich), however, the planned completion date for this of June 2020 will be affected by the Covid pandemic.

The system is able to provide reports and information in a variety of circumstances; antimicrobial resistance patterns and outbreak management data for example.
The continued investment in ICNet must not be lost and the value of this system for reporting and case management cannot be underestimated particularly in light of the incidence of outbreaks and a pandemic in this period.

Surgical Site Infection Surveillance (SSIS)

It is mandatory requirement from PHE for each Trust to complete surveillance in a minimum of one module of orthopedic surgery for one quarter per financial year, as a minimum. This provides national data that can be used as a benchmark allowing individual hospitals to compare their rates of SSI with collective data from all hospitals participating in the surveillance programme in England. The Trust has always been keen to be able to benchmark in more areas of surgery and plans to continue this in the coming year.

The table below summarises the data collected for SSI's by the Trust for the year 2019-20 which has been collected at the Colchester Hospital site for all surgeries other than orthopedic.

Vascular	**2.5%**	**1.3%** (1/75)	**5.3%** (4/75)	**1.4%** (1/73)	**Pending**
Hip Replacement	**0.4%**	**0%** (0/93)	**0%** (0/104)	**1%** (1/105)	**Pending**
Knee Replacement	**0.4%**	**0%** (0/82)	**0%** (0/101)	**0%** (0/102)	**Pending**
Repair of neck of femur	**1.0%**	**1.3%** (2/152)	**0%** (0/119)	**0.7%** (1/135)	**Pending**
Breast	**0.8%**	**-----**	**----**	**----**	**----**
Large Bowel	**8.6%**	**8.2%** (6/73)	**----**	**5.8%** (4/69)	**----**
Small Bowel	**6.8%**	------	-----	----	----
Caesarean section	**6.4%**	----	**9.1%** (23/254)	**----**	**----**

NB: The national programme for surgical site surveillance suggests that at least 50 cases need to be surveyed in a three-month period in order to obtain good quality figures which are statistically significant.

NB: all participating hospitals % per period in brackets in bold.

The infection rates in hip replacement were above the national average during October-December 2019; however, this is only one case out of 105.

There was an increase in the number of vascular surgery SSIs during July-September above the national average. This has been discussed with the vascular team; improvements in documentation were identified as required. During October-December fewer infections were identified (this is below the national average).

All cases of infections are monitored and reviewed at the Surgical Directorate governance meetings.

The IP&C team monitored SSIs in Caesarean sections performed July-September 2019; the infection rate was found to be above the national average during this period (9.1%). The IP&C team met with the division and offered support in the continuing surveillance of infections in this area.

The infection rate in large bowel surgery was 8.2% during April-July, but had decreased to 5.8% October-December. During this time there were a small number of procedures that met the criteria for surveillance.

The cases that are classified as a surgical site infection are discussed with the lead clinician, areas for improvement have been identified that may reduce the risk of reoccurrence in the future.

6. Hand Hygiene

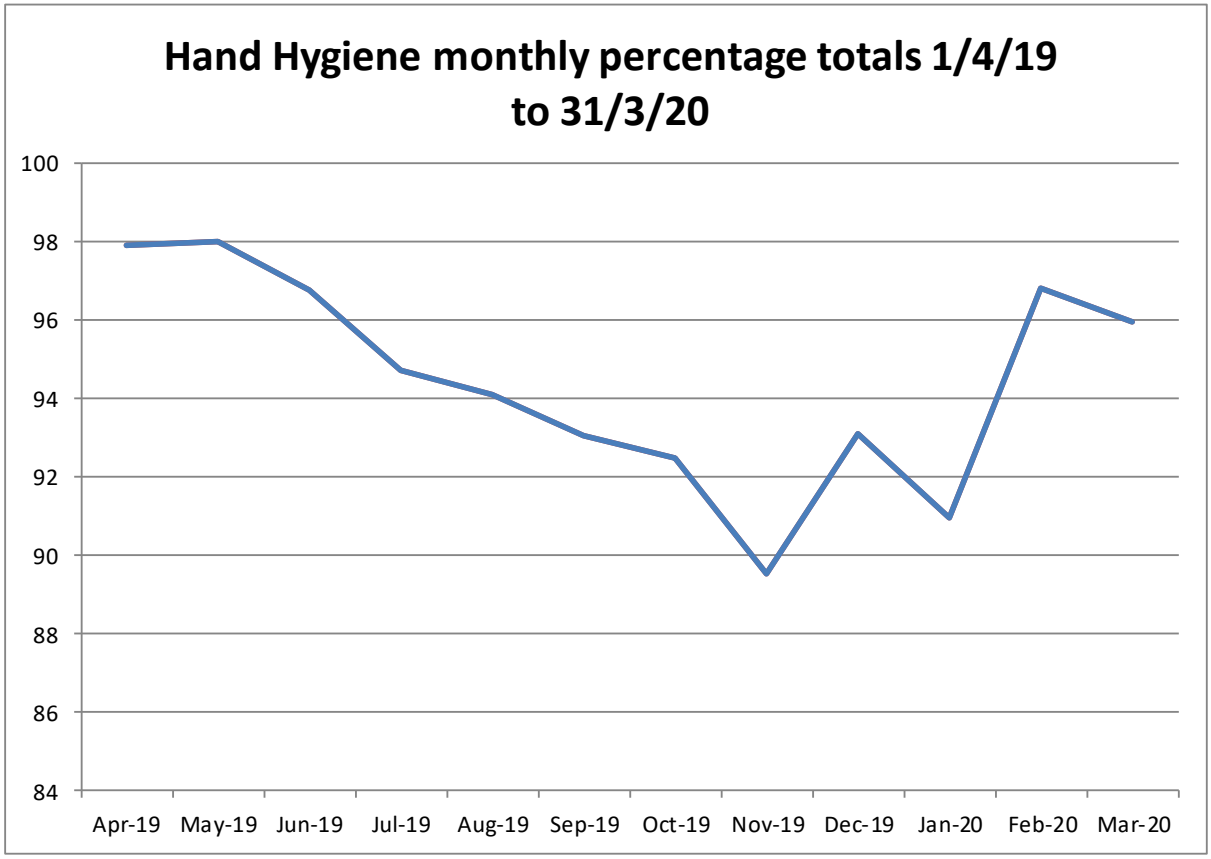
Hand hygiene compliance observations continue to be reported monthly from each clinical area, peer review audits have helped to ensure the validity of the observational audit data. The overall monthly hand hygiene compliance has ranged from 90-98% during 2019/20. The total numbers of hand hygiene observations per month continue to exceed 3,000 per month.

Where there are areas of reduced compliance education and increased awareness sessions are put in place. Hand hygiene day on 2nd May 2019 was supported by the IP&C team, generating awareness of the importance of hand hygiene and adhering to being bare below the elbows.

The Infection Prevention and Control team at Colchester hospital visited wards and departments to encourage staff to participate in the hand hygiene test to see how thoroughly they wash their hands; 157 staff from different disciplines completed the hand hygiene test.

The Infection Prevention and Control team at Ipswich Hospital held an information stand in the south wards for staff to test their knowledge of hand hygiene and the use of gloves and aprons. Compliance with being bare below the elbows was also noted and the following compliance was attained. There has been an overall improvement in compliance since last May (74%).

There are many ad hoc educational opportunities to use the UV light box to demonstrate good hand washing practices to healthcare staff.



Month	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20
Monthly percentage	97.91%	97.98%	96.77%	94.70%	94.10%	93.05%	92.46%	89.51%	93.09%	90.97%	96.79%	95.96%

Created: May 2020
Review: 2021
Author: Melissa Dowdeswell (Interim Director of Infection Prevention & Control/ Chief Nurse)

7. Cleaning Services

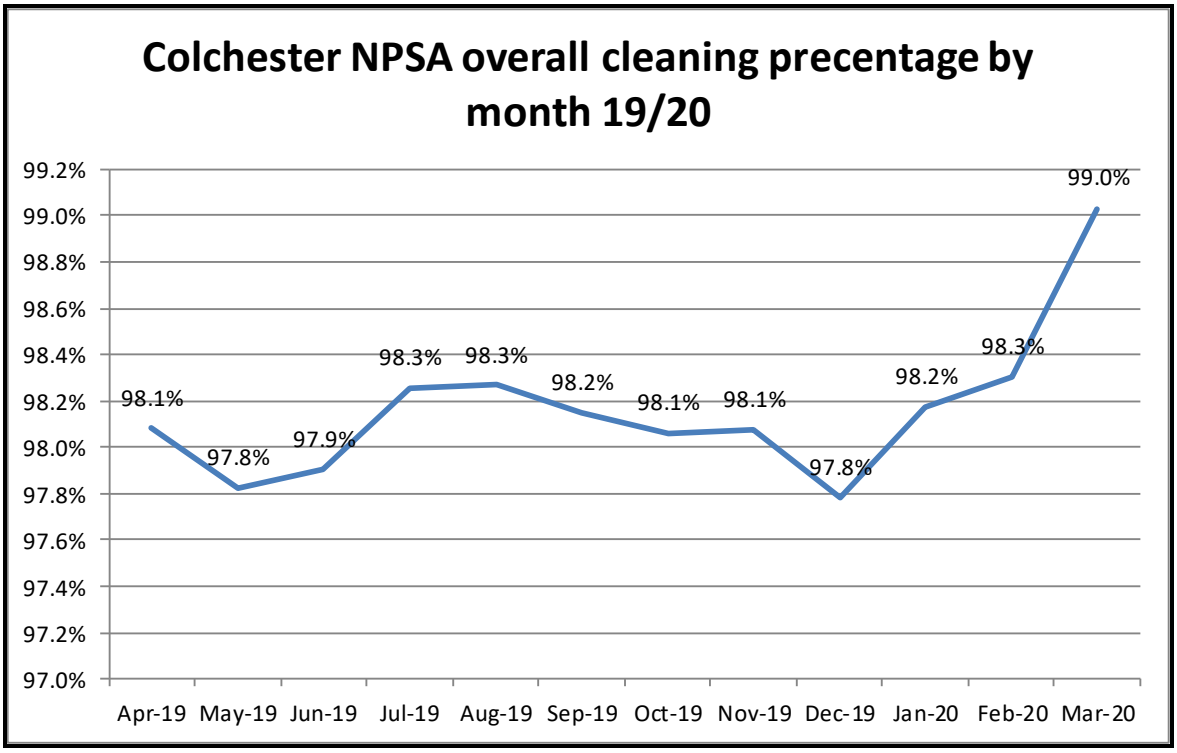
Management arrangements
Delivery of the cleaning services is undertaken using two different models, with services at Colchester and the Community sites being delivered in-house whilst the service at Ipswich remains outsourced.
There are Cleaning Managers based on both the acute hospital sites and they are directly responsible for delivery of the services and ensuring that there is sufficient cover available to meet the demands of the hospital 24/7 for both scheduled and ad-hoc cleaning tasks. There is a Facilities Manager who is responsible for the Suffolk Community sites.

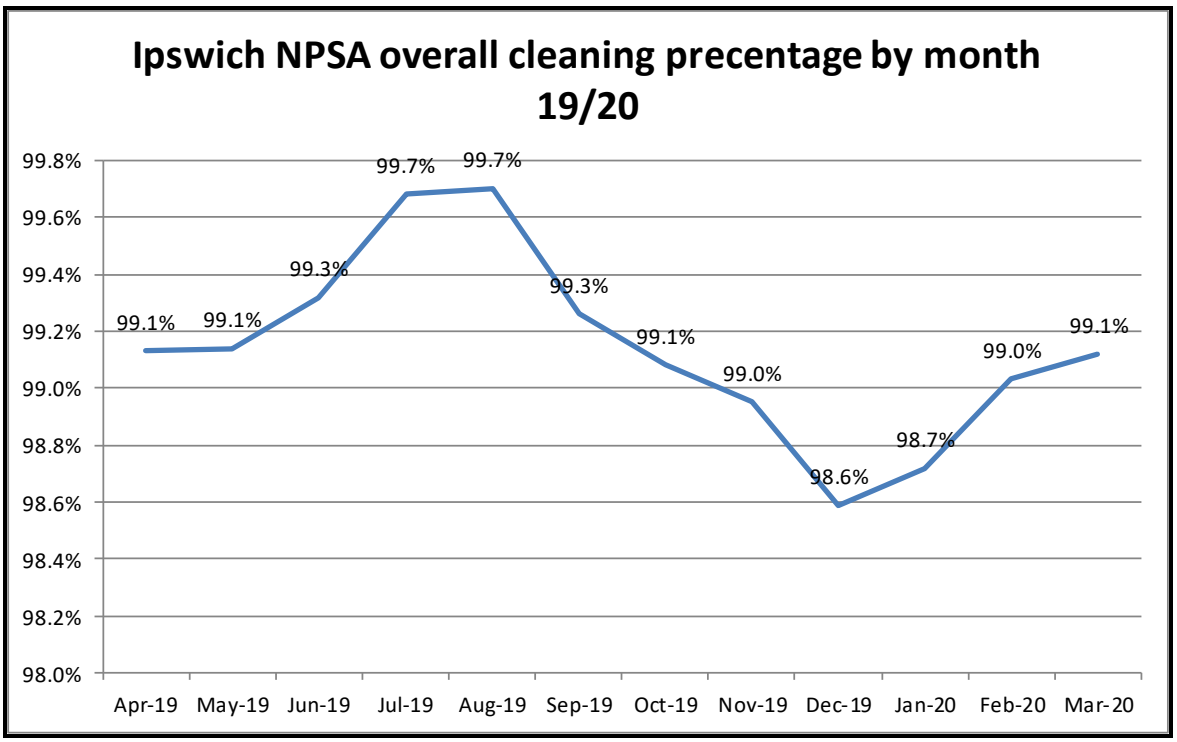
Cleaning schedules are available in all patient areas and updated as required to meet individual service needs with the Ward Sister/Department Manager.
Ad-hoc requests for cleaning area available around the clock at both the acute hospital sites to facilitate the release of beds for new patients once existing patients are discharged.

Monitoring arrangements
All wards and departments throughout ESNEFT are audited and monitored against the National Specifications for Cleanliness (2007) using the 49 Elements which make up an NPSA audit. The results of the audits are reported at the ICC.
Going forward, the Head of Facilities is setting up a new Monitoring Team who will carry out audits across the Trust to ensure that the audits are consistent. From a national perspective, the national specifications or standards have been reviewed and the Trust expects to receive revised documentation for implementation in the near future.

NPSA Audit Results
The charts below detail the overall NPSA audit scores achieved on the different hospital sites over the past year as well as the scores achieved by the three specialties responsible for cleaning, i.e. Housekeeping (Cleaning), Nursing and Estates over the year.

The target average score for the whole Trust is 90% and takes into account the number of wards/departments etc. in each of the *Very High Risk, High Risk* and *Significant Risk* areas where the target scores are *98%, 95%* and *85%* respectively.

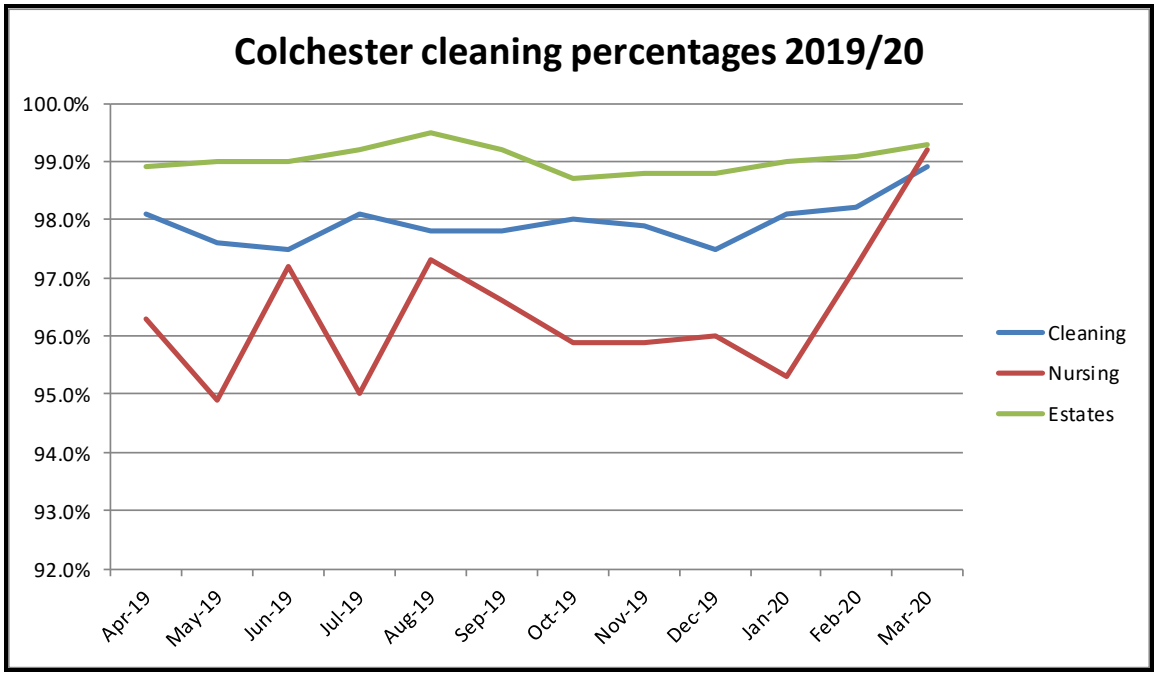




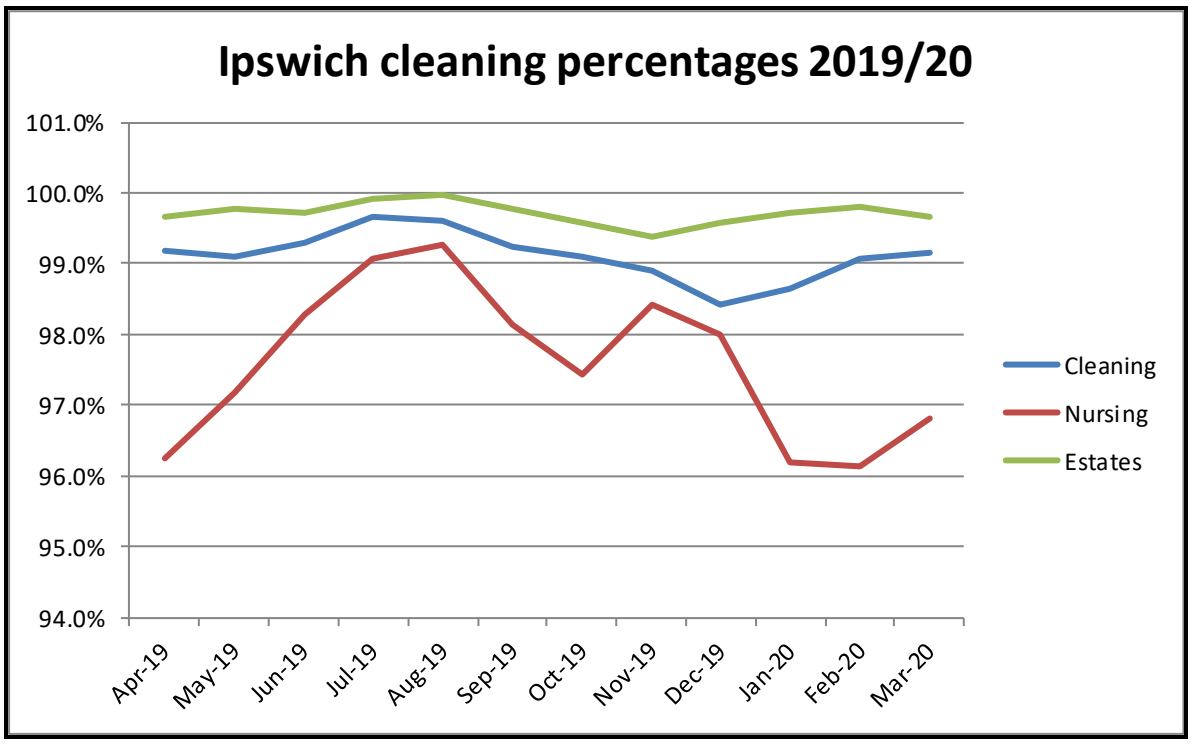
Note - There is no data available for the Community sites due to different monitoring arrangements

Colchester NPSA Scores by Cleaning Specialty in 2019/20

Created: May 2020
Review: 2021
Author: Melissa Dowdeswell (Interim Director of Infection Prevention & Control/ Chief Nurse)



Ipswich NPSA Scores by Cleaning Speciality in 2019/20



N.B. There is no data for the Community sites due to different monitoring arrangments.

IP&C training for Cleaning staff

All Cleaning staff, including outsourced staff, receive Infection Prevention & Control training as part of their mandatory training. They also receive on the job training which supports and underpins the Infection Prevention & Control Training and covers topics such as the use of colour coded mops, and using techniques and practices such as cleaning from clean to dirty, to prevent cross contamination and infection.

Created: May 2020
Review: 2021
Author: Melissa Dowdeswell (Interim Director of Infection Prevention & Control/ Chief Nurse)

Deep Cleaning

Where necessary deep cleans have occurred mostly due to the outbreaks that have occurred. The number of HPV 'foggings' has continued to rise. The Trust works to a RED, AMBER, GREEN cleaning schedule. HPV cleaning is not available within the community settings, although in the case of the MRSA outbreak at Felixstowe hospital an outside company conducted a full ward clean.

Due to the unavailability of a decant ward, regular ward deep cleaning has not occurred.

Patient Led Assessment of the Care Environment (PLACE)

Within this financial year all ESNEFT hospital sites have been assessed. The results of the 2019 assessments are detailed in the following table along with national average.

PLACE CRITERIA	Cleanliness	Food and Hydration	Privacy and Dignity	Condition, Appearance & Maintenance	Dementia	Disability
National Average	98.6%	92.2%	86.1%	96.4%	80.7%	82.5%
Colchester Hospital	99.76%	93.46%	82.43%	99.18%	72.22%	80.31%
Ipswich Hospital	98.95%	92.61%	83.49%	94.53%	77.57%	78.99%
Bluebird Lodge	100%	92.82%	85.42%	100%	82.29%	79.04%
Felixstowe	100%	84.42%	82%	96%	76.64%	77.99%
Aldeburgh	99.12%	92.82%	82.98%	96.62%	82.01%	82.97%

The PLACE process has undergone change at both a national and local level. The local changes have included the formation of a trust wide PLACE assessment team. Assessors from both acute sites underwent training and have formed a cohesive group who have enjoyed the challenges of visiting new sites, which will continue into in this year and beyond.

Continued investment in the patient environment via the ward refurbishment program in the acute hospitals and the introduction of a refurbishment programme within the Community sites will contribute significantly to ensuring that PLACE results improve both on this year's results as well as being able to achieve the national average.

The Director of Estates & Facilities reports the results of the PLACE assessments to the Trust Board once they have been published and are in the public domain. The report includes information relating to not only how well the Trust performed, but also considers the national average and performance against other local Trusts.

The Trust will review and revise the PLACE Action Plan to take into account all sites and the action required in order to evidence compliance with the PLACE assessment criteria. This will then be presented to a meeting of those who take part in the process on the various sites

8. **Decontamination**

Annual report for Decontamination, for the Infection Prevention & Control annual report for 2019/2020

The management system of medical devices in SDS ESNEFT is compliant and certified to the requirements of ISO 13485:2016.
The periodic external audit or assessment program is currently conducted by BSI on the Colchester site and the Ipswich site; the focus was on those aspects of manufacturing relating to obtaining sterility by moist heat in the manufacture of theatre trays and supplementary items following Article 12 of the Directive 93/42/EEC. Both Endoscopy decontamination departments at Ipswich hospital and Colchester hospital are currently compliant and are poised towards gaining accreditation to the BS EN ISO 13485:2016 Quality Management Standards and the Medical Devices Directive (MDD) 93/42/EEC.
The Trust policy does not allow reuse of single-use devices in line with current medical device regulations. The service of decontamination of reusable medical devices continues to be completed in several areas within Trust and these include:

AREA	SERVICE
OPD ENT(PCC)	Endoscopes
Elmstead/Main Th	Endoscopes
Clacton OPD	Endoscopes
Cardio Respiratory	Probes
Mortuary	Instruments
Sterile Services Units IPH &CGH	Instruments
IPH Endoscopy unit	Endoscopy
IPH Ultrasound	Probe
Urology Investigation Unit	Probe
IPH Endoscopy Suit	Endoscopy

Trust local Decontamination and Procedure audit were met for 2019/2020. Results obtained in decontamination audit carried out in the last financial year across both sites assured that decontamination standards are maintained (tested against HTM 01-01 & 01-06 guidelines covering all aspects of decontamination and disinfection managements under HTM 01-01.)

Audit results.
For clarity a RAG rating has been applied <70% is red and requires immediate action, 71% - 90% is yellow and needs action in the near future, > 91%and above means that once red and yellow actions have been prioritized then work can continue in the green areas.

Area	Overall Score	Actions agreed
ERU (IPS)	97%	New automated T&T required for bed side cleaning; training also required for operators e.g. HCA's and Nurses. 2nd quarter New plan –To relocate endoscopy unit to SSD washroom to utilise available air handling unit in SSD. Provide competency assessment for staff. Low temperature steriliser (LTS) required for Choledochoscopes is Procured awaiting commissioning
ERU (COL)	98%	Plans to Install Low temperature steriliser required for Choledochoscopes. New automated T&T required for bed side cleaning; training also required for operators e.g.HCA's and Nurses. 2nd quarter New plan- To relocate endoscopy unit to SSD washroom to utilise available air handling unit in SSD. Provide competency assessment for staff.
Mortuary (IPS)	99%	None
Mortuary (COL)	98%	Provide competency assessment for staff
Cardio Respiratory unit (	98%	No major impact, high disinfection practice in place. Plans to upgrade decontamination facilities when new department project begins. Work still on going.
SSD (IPS)	100%	None
SSD (COL)	100%	None
Decon Unit (Clacton)	92%	At 1st quarter plans was to install new automated T&T, training also required for operators e.g. HCA's and Nurses; 2nd quarter New plan- relocate the endoscopy washroom to PCC with plans to install new EWD in Trust hospital building to encourage ERU have the best workflow process. Provide competency assessment for staff (User Course Training)
Decon Unit PCC	97%	New automated T&T required for bed side cleaning; training also required for operators e.g. HCA's and

		Nurses. User training required.
Theatres (IPS)	n/a	Guidance sent to theatres to aid identification of sterile and non -sterile products for patient care.
Theatres (COL)	n/a	Guidance sent to theatres to aid identification of sterile and non -sterile products for patient care

Key:				
Minimal compliance	<70%		Action plan due within 1 week	**Action plan required 1 week**
Partial compliance	71% - 90%		Action plan due within 2 weeks	**Action plan required 2 week**
Compliance	> 91%		Action plan due within 4 weeks	**Action plan required 4 week**

DECONTAMINATION EDUCATION

All staff working within Sterile Services Departments completes a combination of in-depth departmental and e-learning training packages. There is a provision of in-house training by Althea for staff. The in-house training complies with the BS EN ISO 13485:2016 quality standard and within 18 months of commencement in post.

Eight staff within the Sterile Services Departments at IPH have been enrolled on Decontamination science training course equivalent to NVQ Level 3 with IDSC for 2019/2020 section. Decontamination training will continue to be rolled out to other staff in Sterile Services during 2020/2021; four management staff are booked for decontamination user course. All other ESNEFT staff involved in the decontamination of reusable medical devices complete decontamination-training specific to their area of work including Users course.

Adverse events

The Datix incident management system is used to record and manage adverse incidents across the Trust including those relating to SDS. Within 2019/20 a corrective and preventive action was implemented as control measures against an incident when a Patient had Cystoscopy in the Elective Care Centre on the 3/09/2019; the patient was admitted to the assessment unit where he was told he had sepsis. He has raised concerns that the Cystoscopy equipment that was used had not been properly sterilized. Other incidents include sharps injury to staff, trays

returned to SSD that were missing instruments, and faulty washer disinfector feeds causing injury to staff. Investigations and lessons learnt were recorded against all incidents.
Further statistics for 2019/20 indicated a decreasing trend of sharp incidents and missing items across sites compared to last financial year. Incident management system and investigated, with learning disseminated to staff. Systems and processes are in place to maintain this progress.

Statue of outstanding issues reported 2019/20

issues	Action	RAG
Use of Trophon to provide more efficient track and trace on probes used on patients and to promote time matters philosophy on patient care service.	Issue discussed at ICC.	
Equipment replacement programme to be reviewed and implemented in 2019/20 to ensure equipment nearing the end of active life cycle is replaced in a timely manner.	List of machineries requiring replacement has been complied submitted to Estate	

Environmental:

- Both SDS sites are currently compliant in all microbiological tests in line with ISO 14644;
- Active air results in IAP(IPS &CGH) – Result with acceptable limit of 140cfu/m3
- Particle counts for both sites on 0.5 & 5.0 micron sizes results for class 8 ISO specifications are within acceptable limits
- Bioburden results for both sites - All counts are within specified Limits
- Settle plate test results in the IAP for both sites are within acceptable limits of 20cfu/hr.

Policy update

ESNEFT Decontamination and Disinfection Policy that have become out of date in the year have been reviewed in conjunction with the Infection Prevention and Control Team and published on the Trust Intranet. Current policies which need

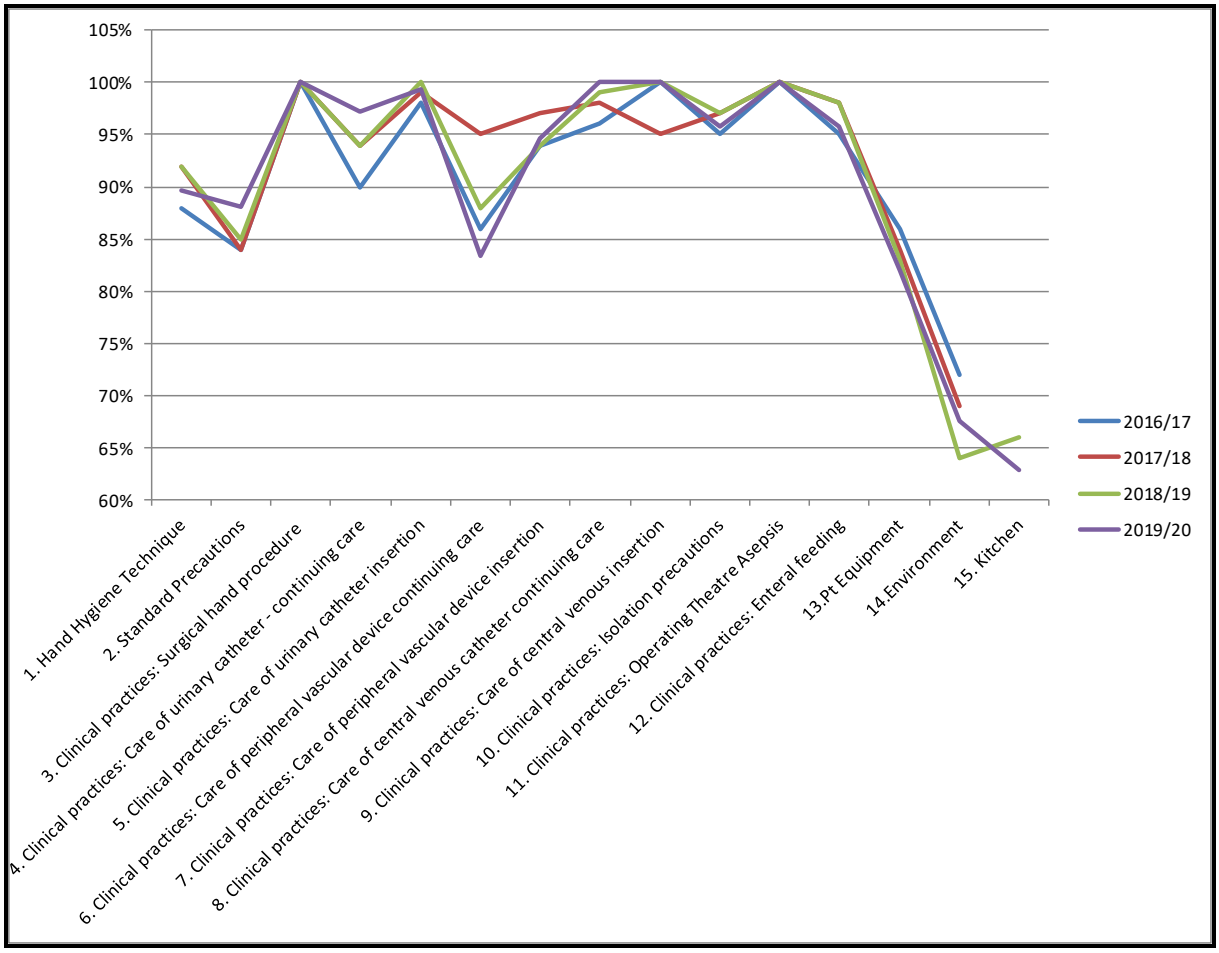
- Endoscopy Decontamination Standard Operating Procedures (review date December 2021)

9. Audit

Audit programme and outcomes

The annual audit of wards and departments has continued. Not all areas were audited during this period. Priority has been to audit the wards over departments. These audits review over 200 items over 15 standards to assist in the reducing the risk of infection in the environment and by clinical practices. It is noted that the lowest compliances are the physical aspects of environment and the upkeep of the kitchen areas. The former was implicated in the findings from the MRSA outbreaks, and the need for ward refurbishments and the availability of a decant ward to facilitate these against approval for business cases.

Year audit completed	1. Hand Hygiene Technique	2. Standard Precautions	3. Clinical practices: Surgical hand procedure	4. Clinical practices: Care of urinary catheter - continuing care	5. Clinical practices: Care of urinary catheter insertion	6. Clinical practices: Care of peripheral vascular device continuing care	7. Clinical practices: Care of peripheral vascular device insertion	8. Clinical practices: Care of central venous catheter continuing care	9. Clinical practices: Care of central venous insertion	10. Clinical practices: Isolation precautions	11. Clinical practices: Operating Theatre Asepsis	12. Clinical practices: Enteral feeding	13.Pt Equipment	14.Environment	15. Kitchen	OVERALL SCORE
2016/17	88%	84%	100%	90%	98%	86%	94%	96%	100%	95%	100%	95%	86%	72%	N/A	83%
2017/18	92%	84%	100%	94%	99%	95%	97%	98%	95%	97%	100%	98%	84%	69%	N/A	84%
2018/19	92%	85%	100%	94%	100%	88%	94%	99%	100%	97%	100%	98%	83%	64%	66%	81%
2019/20	90%	88%	100%	97%	99%	83%	95%	100%	100%	96%	100%	96%	82%	68%	63%	80%



Saving Lives monthly compliance scores

Saving Lives/High Impact interventions Monthly totals 2019/20												
Month	Prevent Ventilator Associated Pneumonia	Prevent Infection PVAD (Insertion)	Prevent Infection PVAD (Ongoing)	Prevent Infection - CVAD (Insertion)	Prevent Infection - CVAD (Ongoing)	SSI - Pre	SSI - Interoperative	Prevent Infection - Chronic Wounds	Prevent Catheter associated UTI - Insertion	Prevent Catheter associated UTI - Continuing	Promote Stewardship Antimicrobial Prescribing - All Care Settings	Promote Stewardship Antimicrobial Prescribing - Secondary Care
April		97.7	92.99	100	100	100	100	87.5	99.06	99	81.16	83.82
May	100	97.99	92.65	100	100	100	100	100	100	100	88.24	86.84
June	100	99.37	94.24	93.33	100	100	100	100	100	99.24	86.84	75
July		99	94.76	100	98.08	100	100	100	100	99.41	84.07	85.03
August		98.13	71.43	100	98.61	100	100	100	100	98.77	86.81	66.67
September	100	98.09	98.97	100	100	100	100	85.71	100	96.89	83.24	83.64
October	100	97.01	97.77	100	100	100	100	85	99.48	97.83	70.31	75.12
November		98.9	99.66	100	78.57	100	100	100	100	98.73	73.66	75.47
December	100	99.67	99.66	93.33	100	73.68	87.5	100	100	99.45	71.62	75.22
January	100	99.7	98.28	100	100	100	100	100	100	97.67	77.74	77.59
February	100	98.68	98.68	100	100	97.37	100	100	100	98.96	74.1	81.07
March	50	99.59	98.4	100	100	100	100	100	100	100	81.02	

IP&C environment, cleanliness and clinical practices audits

The infection prevention and control audits of environment, equipment cleanliness and clinical practices are undertaken in clinical areas. The results have remained relatively consistent over the years. It is a good opportunity to support clinical teams in highlighting best practice and practices which could be improved upon. These audit findings provide evidence in order to support ward refurbishment risk assessments for instance.

The frequency of these audits being conducted is prioritised in accordance with the National Standards of Cleanliness risk stratification.

10.

10. ANTIBIOTIC STEWARDSHIP GROUP (ASG) REPORT

Purpose: The purpose of the Antibiotic Stewardship Group is to promote the effective and economic use of antibiotics within the trust. It does this mainly through review of the Trust's antibiotic policy which gives detailed guidance to clinicians regarding the choice of antibiotic therapy, taking into consideration national policy and resistance data. There is also a focus on the "Start Smart then Focus" guidance which lays out what is expected of us with regards to Antimicrobial Stewardship. The Stewardship Group meets quarterly.

Audit

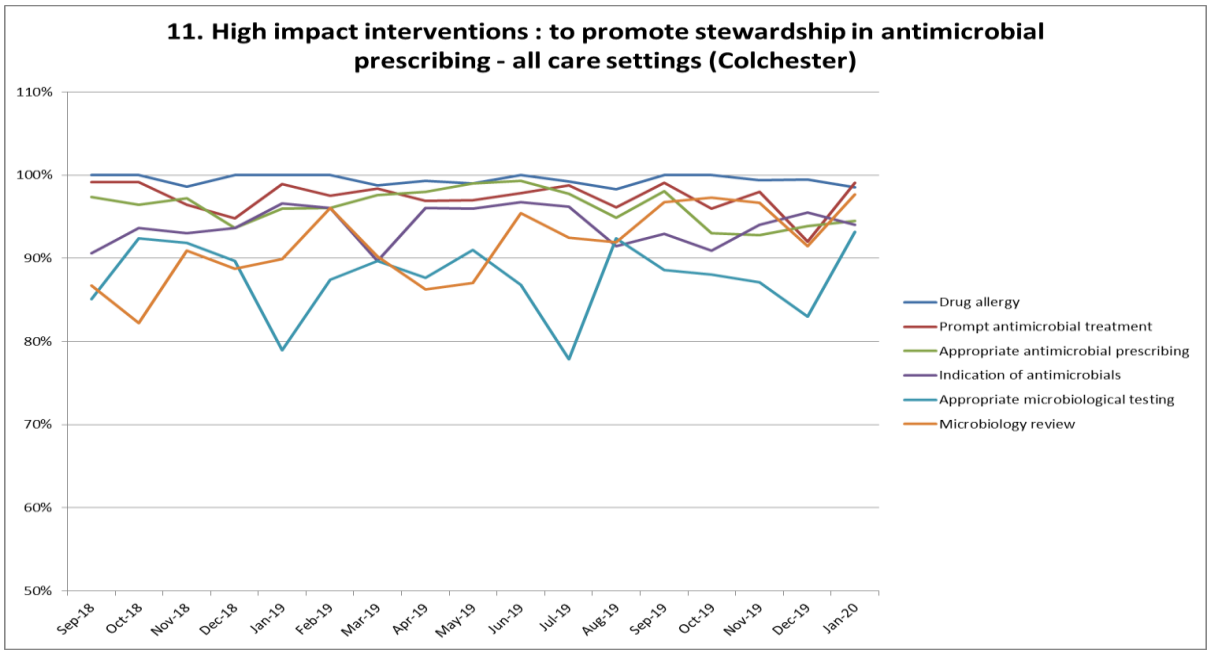
Saving Lives Audit - High impact interventions (10 patients per ward per month)

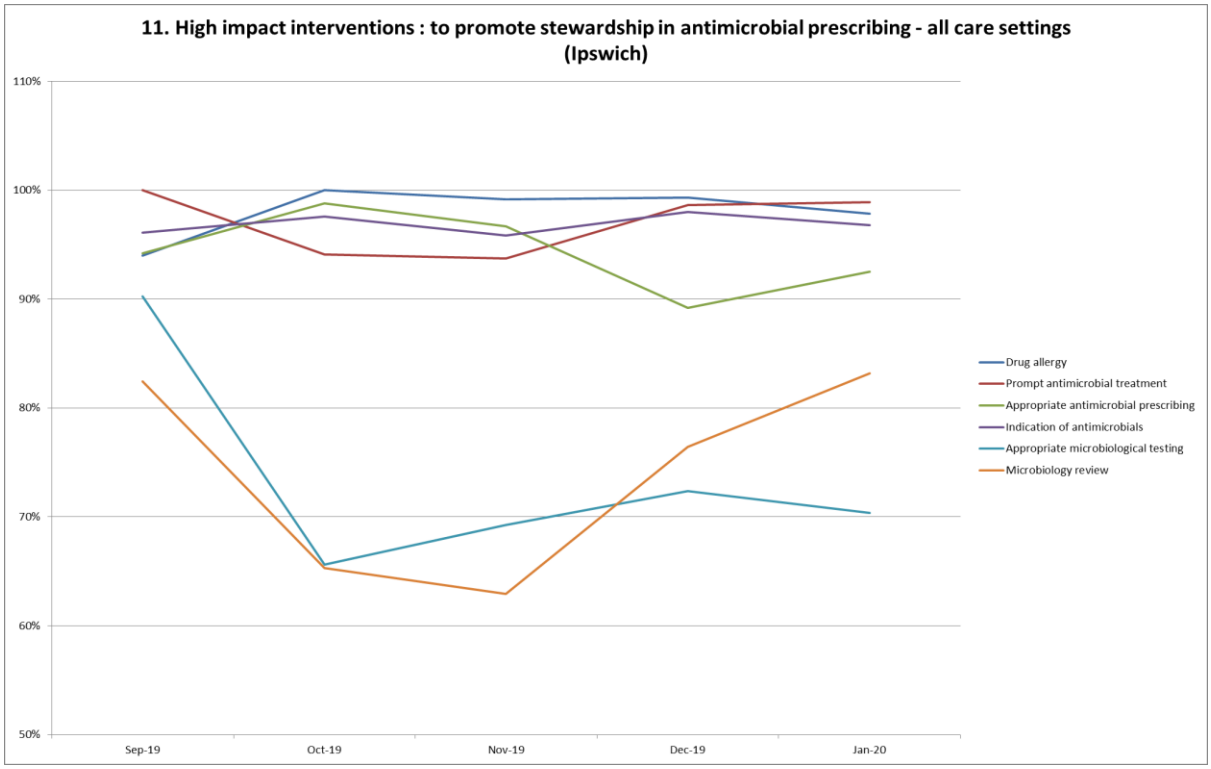
The biggest change this year has been the inclusion of the saving lives data at CDG governance meetings, the data is now more visible and a greater interest by leading clinicians is expected. Uptake of the audit is at its highest with most wards submitting data on a regular basis

Data consistently indicates 2 areas to prioritise and plan for improvement:

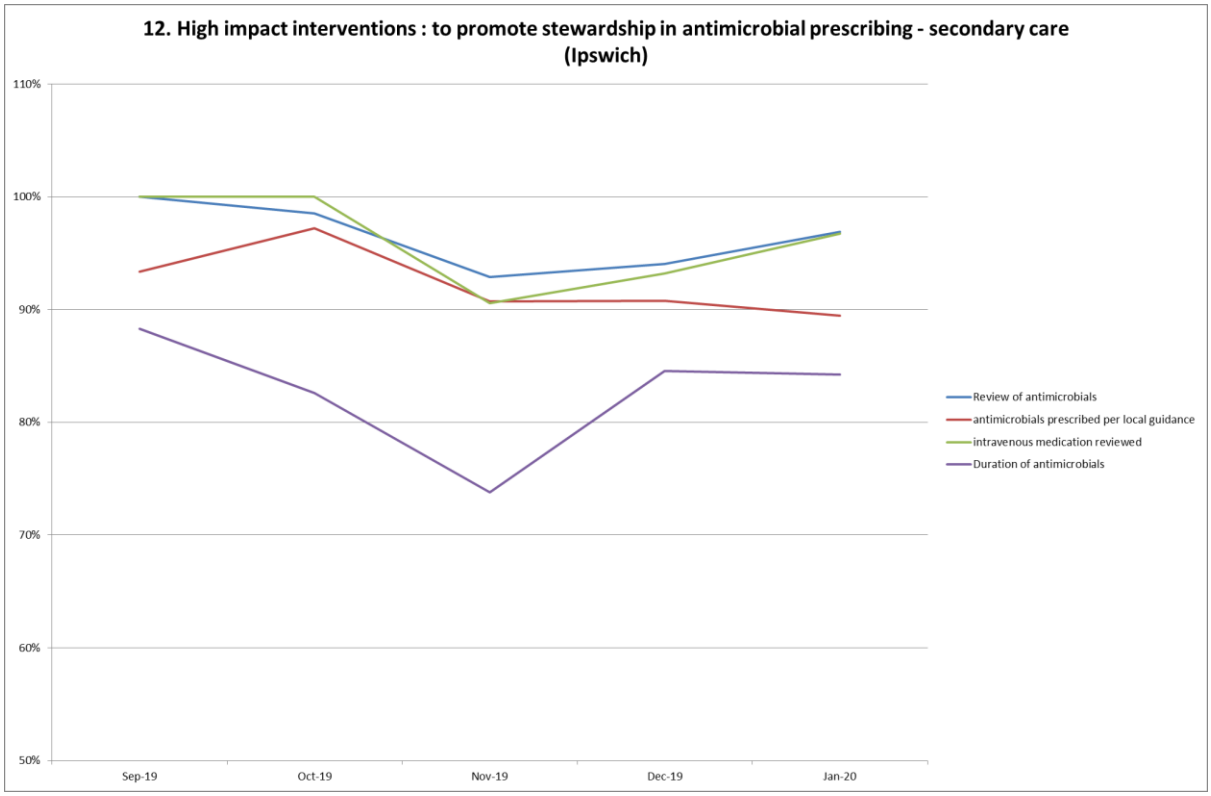
1. Appropriate microbiological testing' (i.e. samples) – Tables 1
2. Duration of antimicrobials (i.e. course length) – Tables 2

Tables 1

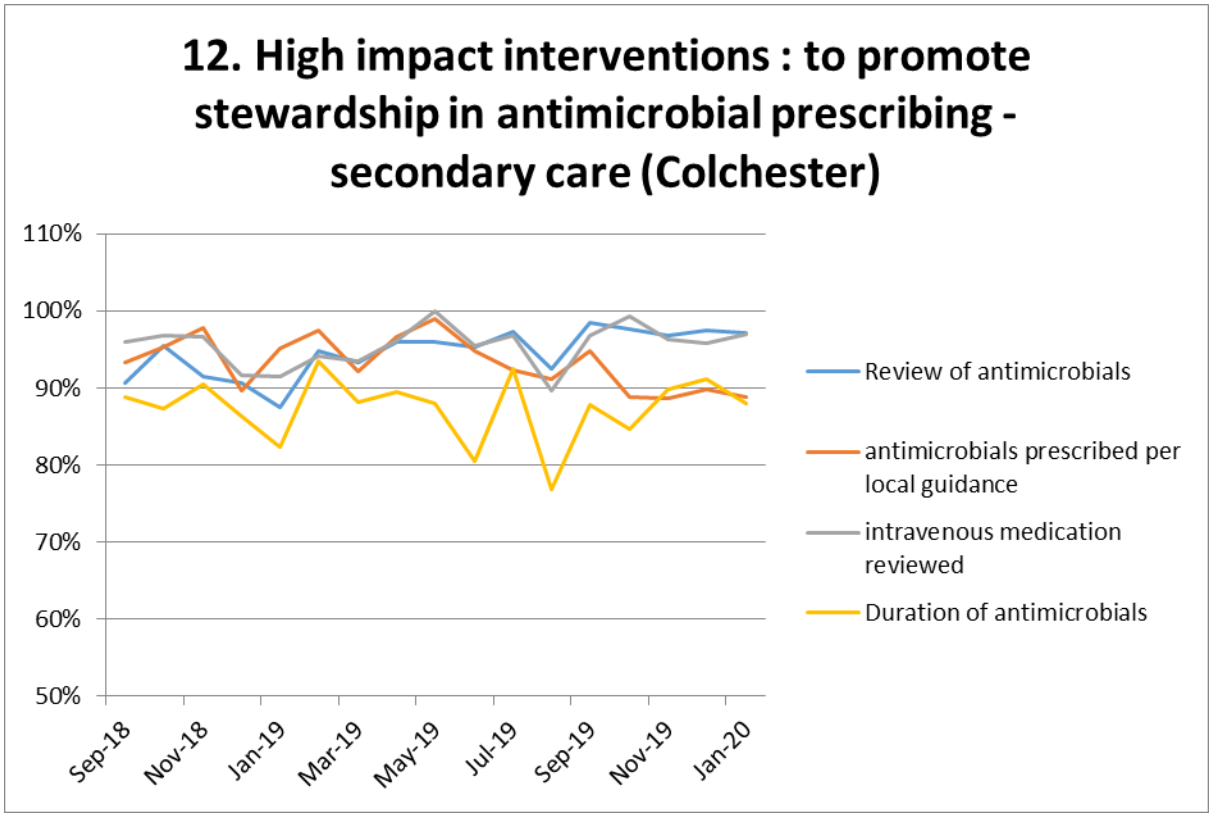




Tables 2



Created: May 2020
Review: 2021
Author: Melissa Dowdeswell (Interim Director of Infection Prevention & Control/ Chief Nurse)



Plans for Improvement

1. A meeting has taken place with the EAU team (consultant, nursing and pharmacy) at Colchester site who have identified a drop in their audit results. Actions from this meeting included a larger daily audit for the month of February of all prescribing and collation of the data recorded as per consultant prescriber. Common themes within individual teams will be fed back. If this is successful this process could be rolled out to other areas including EAU at Ipswich site who also currently perform similarly to Colchester site.
2. Mandatory E-learning for all prescribers and nurses in prudent antimicrobial prescribing is imperative for audit data to improve, this has never been supported by the Trust at either site previously
3. Focus on microbiological testing in the re-vamped antimicrobials doctors induction talk and FY1/FY2 teaching at Colchester
4. Blood culture teaching session in ED planned for 2020
5. Respiratory antibiotic guidelines includes information on taking sputum samples.
6. Auditing of antimicrobial prescribing in ED to highlight areas of improvement which will be fed back to the department's cross-site in line with new ED pharmacist post as some data attributed to many wards will stem from initiation of antibiotic prescribing and sample taking in ED.
7. Colchester only: Withdrawal of antibiotic TTO packs from Orthopedics/Medical/COTE wards designed to help pharmacists see every oral antibiotic prescription on these wards to order the exact amount of antibiotic to finish the course.

Key issues/actions:

- Antimicrobial Stewardship Implementation Programme has been finalised for this financial year. Some work is still be outstanding from last year's programme.
- Antimicrobial Guideline App – at risk with an increase in subscription fees which may result in this being lost if not funded.
- Saving Lives audit – outstanding wards yet to submit data: Lavenham, Kesgrave and Critical Care. Plans to roll out to ED in line with new ED pharmacist post holder.

- ARK drug chart to be rolled out to surgery (Ipswich) and to introduce at Colchester site, requires increase in uptake of ARK training. Liaison with surgery currently to move this forward.
- For any Trust wide antimicrobial CQUINs to be achieved in the future, the Trust needs better project planning and further cross-site engagement from consultants. They are unachievable by the antimicrobial team alone.
- ESNEFT Paediatric Guideline Development in progress, plan for ratification July 2020.
- E-learning for prescribers and nurses not being completed Trust wide as not mandatory. Submission of request for Antimicrobial Stewardship E-Learning to become mandatory – we have yet to hear back if successful.
- Induction training – progress needs to be made for all relevant staff cross-site to receive the same level of antimicrobial stewardship training.
- OPAT expansion to Colchester: IT systems are inadequate for cross site working still. IT working on this to give access to Colchester patient's information at Ipswich hospital.
- PICC line service up and running at Colchester which will facilitate OPAT.
- Development of OPAT pharmacy services across both sites in progress, exploring further options for elastomeric pumps and intimates to make the service more efficient and expand to a wider patient group.
- PICC line service at Ipswich is being reduced, with divisions pulling their staff to support the service, PICCs are only being placed couple of times a week which is delaying discharges at Ipswich site for OPAT

ARK (Antimicrobial Review Kit) – Ipswich site only

The ARK study, originally rolled out on Capel ward has successfully been rolled out across medicine. Roll out to surgery is planned for 2020.

Concerns to be addressed with current progress:

- Encourage uptake of the training to ensure a sound understanding of the chart changes and proper use of them. This has been particularly poor so far.
- Encourage better quality review of prescriptions by the relevant grade doctors. Justification of decision to continue is lacking in documentation of medical notes and/or on drug charts.

Education and Training

An application has gone in to produce a Mandatory E-learning Training package for all prescribers, Pharmacists and Nurses, we await to hear form T & D. Both sites currently have separate non-mandatory training packages. Once approval granted a joint E-learning package will be developed.

Antimicrobial Stewardship face-to-face training still remains separate cross site. CHUFT doctors will receive a session on induction whereas Ipswich only teach on FY1 and FY2 training during the year.

The Infection Prevention & Control conference made its debut at Ipswich site last year and teaching on prudent antimicrobial stewardship is included at both sites conference. Each ward has an allocated Infection Prevention & Control link.

Antimicrobial Guideline Merge
Work on a joint Antimicrobial Guideline is now complete (MOC approved 8.5.19) as well as the ESNEFT Antimicrobial Stewardship Strategy. Associated guidelines still being worked on include:

Guideline	Proposed Completion Date
Antimicrobial Treatment Guideline - Adults	Complete
Antimicrobial Stewardship Strategy	Complete
Antimicrobial Prophylaxis Guideline	July 2020
Neutropenic sepsis Policy	October 2020
Antimicrobial Prescribing Guideline – Paediatrics	July 2020
Antifungal Prescribing Guideline	July 2020
PEP Guidelines	July 2020

11. IP&C Training Activities

Induction and Mandatory update for all staff
Induction sessions have returned to a face-to-face delivery. The Infection Prevention & Control E-learning is reviewed and updated at least annually.

Training compliance is reported in the monthly IP&C ICC report. Any deficits are highlighted to divisional teams to action.

Other training activities
Over the winter period additional face-to-face training were run to highlight awareness of a variety of organisms and remind staff about the measures taken with winter related infections such as norovirus and influenza.

Educational videos on the donning and doffing of PPE were prepared by the IP&C team in collaboration with the Digital Team, specifically for the COVID-19 pandemic. These were made available on the intranet.

Infection Prevention & Control link workers

The infection prevention and control link role continues to extend to representatives from all staff groups. There were educational sessions held for IP&C link workers during 2019/20 at Colchester and Ipswich Hospital. The topics covered at the respective sites included:

Colchester Hospital:

- Hand Hygiene
- Influenza
- Pulmonary Tuberculosis
- Ventilation
- Environmental Cleaning
- Measles
- Antimicrobial Stewardship Saving Lives Audit
- Gloves and aprons usage and challenging poor practice
- How to care for a patient with; MRSA, *C.difficile*, Flu, Norovirus, Carbapenem Resistant Organisms (CRO), Streptococcus group A
- Peripheral cannula audit findings Colchester Hospital
- Chicken Pox and Shingles

Ipswich Hospital:

- MRSA outbreaks
- Water safety and Legionella awareness
- Influenza
- Antibiotic stewardship
- Learning from *C.difficile* cases
- Cleanliness/environmental audits
- iGAS outbreak in the community

Plan for 2020/21	Key points
Compliance with Hygiene Code (2008 updated 2015)	• To continue to review action plan against the code on a regular basis
Responding to the needs of the COVID-19 pandemic	• To continue to provide expertise, advice and education for clinical teams during the COVID-19 pandemic situation and the recovery plan. • To be responsive to national guidance updates.
Management of MRSA	• To review and update the Trust's MRSA action plan for Ipswich and East Suffolk, to deliver all outstanding actions. • To continue to assist Divisions in achieving compliance with MRSA emergency admission screening procedure (across all sites since January 2020). • Pursue investigations into cases of new hospital associated MRSA isolates
Surveillance	• COVID-19 case reporting • *E coli* bacteraemia RCA and reporting • MSSA bacteraemia RCA and reporting • MRSA bacteraemia RCA and reporting • *Pseudomonas* bacteraemia reporting • *Klebsiella* bacteraemia reporting • *C diff* RCA and reporting • CRO reporting and RCA • Alert organism reporting and Management
Annual IP&C audits	• Support the inclusion of all clinical areas in the programme of Infection prevention and control audits with timely feedback to clinical teams. • Areas to continue to be prioritised as per the National Standards of Cleanliness risk stratification.
Saving Lives audits	• Continue to support clinical teams in the education and use of the tools • To improve the number of returns from wards and departments post COVID-19 pandemic • Use audit results to review and revisit areas requiring improvement. • To continue to promote peer review of audits to facilitate learning across the divisions
Facilities /Estates Project review	• Collaborate with Estates to assist with the progression of ward refurbishments. • To work with Trust Facilities Management team to review National Standards of Cleanliness. • Work with Projects team to manage IP&C through feasibility/design, build and handover stages of projects
Promote e-learning programme and audit uptake	• Continue updating programme as required • To audit uptake and report to ICC/QPSC monthly
Mandatory updates for Infection Prevention & Control and antimicrobial stewardship for all staff groups	• To continue to support the Trust programme at induction and mandatory update sessions – update as required • Programme available in e-learning format for induction • Antimicrobial e-learning package – aim for mandatory training within the Trust
Update IP& C policies	• Ongoing programme to review and update ESNEFT IP&C policies and procedures, and as required by national guidance.
ICNet surveillance system	• To continue to pursue the upgrade of the system at Colchester Hospital.
Continue with Surgical site surveillance	• Continue with agreed rolling programme of modules in addition to the mandatory modules
Infection Prevention and Control Link System	• To continue to develop the link role into other healthcare disciplines. • To further develop the link role to enhance local infection prevention and control education and practice.

Created: May 2020
Review: 2021
Author: Melissa Dowdeswell (Interim Director of Infection Prevention & Control/ Chief Nurse)

Created: May 2020
Review: 2021
Author: Melissa Dowdeswell (Interim Director of Infection Prevention & Control/ Chief Nurse)

Created: May 2020
Review: 2021
Author: Melissa Dowdeswell (Interim Director of Infection Prevention & Control/ Chief Nurse)