Excellence in rural healthcare

NHS
United Lincolnshire Hospitals
NHS Trust

Director of Infection Prevention and Control Annual Report

2018 - 2019

United Lincolnshire Hospitals NHS Trust

Version Control

Version	**1.0**
Type	**Annual report**
Directorate	**Corporate**
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Approval Date	**13th May 2019**
Issue Date	**13th May 2019**
Frequency of Review	**Annually**
Review Date	**31st March 2020**

Version	Section/Paragraph/ Appendix	Description of amendments	Date	Author/Amended by
0.1	Whole document	Complete first draft	15/04/2019	Kevin Shaw
1.0	Whole document	Approved version	13/05/2019	Kevin Shaw

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Section 1 Forward

I am delighted to present United Lincolnshire Hospitals NHS Trust's annual Infection Prevention and Control Report for the 2018–2019 financial year in which we also celebrated the 70th anniversary of the NHS. Healthcare has changed significantly over the last 70 years and we are seeing more patients with complex needs. United Lincolnshire Hospitals NHS Trust remains committed to providing high quality, clean and safe patient centred care. Infection Prevention and Control supports all elements of care delivery in order to reduce the risks of preventable healthcare associated infections in patients/service users, staff and visitors.

The report shows that the Trust has made sustained progress towards improving patient safety by achieving the key priorities listed in the Trusts infection prevention and control action plan. This progress was made despite the continued additional pressures of being placed in to 'special measures' by the Care Quality Commission (CQC) and managing a significant financial deficit.

As a large rural multi-site and complex organisation, our teams have worked effectively together to provide strong leadership and support to all directorates to ensure that good progress was made towards compliance to the Code of Practice on the prevention and control of infections and related guidance (the Hygiene Code) as part of Regulation 12 of the Health and Social Care Act 2008 (Revised 2015)[1]

Michelle Rhodes
Director of Nursing and Director of Infection Prevention and Control
United Lincolnshire Hospitals NHS Trust

1 http://www.legislation.gov.uk/ukpga/2012/7/contents/enacted

Section 2 Executive summary

In regard to Infection Prevention and Control (IP&C) performance in 2018/19, United Lincolnshire Hospitals NHS Trust has enjoyed a year of continuous improvements despite facing significant challenges both in terms of internal operational pressures and by external inspection and regulation.

In 2017 NHS Improvement rated the organisation as red for IP&C performance. Some key actions were identified and immediately put in to place including a fully comprehensive hygiene code gap analysis which measured the trusts compliance against all 135 compliance requirements. In less than 2 years however, ULHT moved from only 61% full compliance to 97% full compliance. Partial compliance (evidence of actions in place to achieve compliance but fully achieved) improved from 24% to 2% and no evidence of compliance decreased from 14% to 1%.

This level of achievement was largely due to a mix of strong and clear leadership, an extraordinary effort by a number of individuals and teams and having a compliance format in place (hygiene code gap analysis) that served as the key action plan for activities to be built upon. There were two subsequent follow up assessment visits carried out by NHS Improvement and both rated ULHT as green for IP&C. it is clear that following a year of intense activity around IP&C, the organisation as a whole is providing a safe and high quality service for patients.

The operational processes used by the IP&C team have improved how they support their colleagues and meant that they were able to deliver a more effective and efficient service. This included working as a trust wide corporate function rather than focussing on a site based operating model. In addition to this, the IP&C team now attends daily bed meetings and provides daily updates to support inpatient areas and operations teams with a risk based side room availability chart which allows decisions to be made regarding priority of patients in isolation. This also helped with ‘out of hours’ bed management decision making.

Even though the trust was rated as green by NHS Improvement, there is still much work to be done and momentum must be maintained. Patient safety, quality and IP&C will remain a key priority for ULHT and every possible effort will be made to ensure clean, safe, high quality care becomes the standard.

Section 3 Introduction

United Lincolnshire Hospitals NHS Trust is one of the largest trusts in the country. We provide services from 3 acute hospitals in Lincolnshire - Lincoln County Hospital, Pilgrim Hospital, Boston, and Grantham and District Hospital. The Trust also provides a wide variety of outpatient, day case and inpatient services from a range of other community hospitals operated by Lincolnshire Community Health Services or local GP clusters. These include: Louth County Hospital, John Coupland Hospital (Gainsborough), Johnson Community Hospital (Spalding) and Skegness and District General Hospital.

We provide a wide range of healthcare services delivered by over 7,500 highly trained staff. Our services cost more than £390 million each year to provide. In an average year, we treat more than 180,000 accident and emergency patients, over 600,000 outpatients and almost 100,000 inpatients, and deliver over 5,000 babies,

The Trust primarily serves the 757,000 residents of Lincolnshire which is one of the fastest growing populations in England. The Trust also provides a wide variety of outpatient, day case and inpatient services from a range of other community hospitals operated by Lincolnshire Community Health Services or local GP clusters. These include: Louth County Hospital, John Coupland Hospital (Gainsborough), Johnson Community Hospital (Spalding) and Skegness and District General Hospital.

To ensure that we deliver the very quality best services in terms of quality and safety, good infection prevention and control practices are essential. Throughout 2018/19, this was a key trust improvement requirement and significant work was undertaken to ensure that progress could be demonstrated.

Infection prevention and control is everybody's responsibility and all members of staff, patients and visitors to ULHT are expected to take the necessary steps to reduce the risks of themselves or others acquiring or transmitting infections. The infection prevention and control team in ULHT primary purpose is to maintain patient safety by supporting and advising staff and patients as needed to ensure that those responsibilities are met.

This report will demonstrate the work undertaken during 2018/19 to monitor and manage infection prevention and control systems and processes. The main body of the report will follow the format of the Code of Practice on the prevention and control of infections and related guidance (the Hygiene Code) as part of Regulation 12 of the Health and Social Care Act 2008 (Revised 2015)[2] and the associated 10 criteria.

[2] http://www.legislation.gov.uk/ukpga/2012/7/contents/enacted

The hygiene code compliance criterion.

Compliance criterion	What the registered provider will need to demonstrate
1	Systems to manage and monitor the prevention and control of infection. These systems use risk assessments and consider the susceptibility of service users 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 antimicrobial 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 as appropriate.
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 and obligations of staff in relation to infection.

Section 4 Key Achievements

Below is a list of key achievements relating to IP&C in ULHT in 2018/19.

- 2018/19 saw an effective system of the management of suspected infectious patients with no significant outbreaks reported. The organisation now has close multi-professional working practices and an infectious disease outbreak management plan that reduces the risks of uncontrolled outbreaks.
- By the end of 2017/18, ULHT was over its Clostridium *difficile (C.diff)* trajectory by 10 cases (69/59). At the start of the 2018/19 financial year, ULHT was still seeing numbers of *C.diff* significantly higher than expected. A thematic analysis was undertaken and it was identified that antibiotic prescribing was a key factor in all previous cases for 2017/18. A working group consisting of IP&C, Antimicrobial Pharmacists and Microbiologists regularly visited high risk areas on all sites and as a result a significant reduction in *C.diff* cases was seen. By year end (March 2019), the trust finished under its expected trajectory by 1 case (57/58).
- After much effort, the business case for a fully functional OPAT service was approved in November 2018. This service would allow suitable patients to receive IV antibiotics in their own setting, thus reducing risk of infection to themselves and others, and improving bed capacity to assist ULHT with its ever increasing demand on providing care. The commissioners have been very excited winter pressures funding towards the end of 2018/19 allowed this service to get off the ground.
- ULHT achieved one of the highest frontline health care worker flu vaccination uptakes nationally with 87% of its front line workers vaccinated. The occupational health teams across all sites worked extremely hard to ensure this was possible. This meant that a significant number of frontline health care workers would not carry those flu strains and therefore could not pass them on to patients, visitors or colleagues. During the 2018/19 flu season, the predominant strain of flu was included in the vaccine meaning that our staff were genuinely protecting patients by having the vaccine. By number of staff vaccinated, ULHT was second nationally. This is an extremely strong position for this programme and is testament to the positive culture of patient safety.
- Blood culture contamination rates have significantly decreased especially over the past year and the trust is close to the national aspiration of 3% and well below the national acute trust average of 5%. This is a decrease from a trust mean of 8% in June 2016 and a site high of 11%.

Section 5 Performance report

Criterion 1: Systems to manage and monitor the prevention and control of infection.

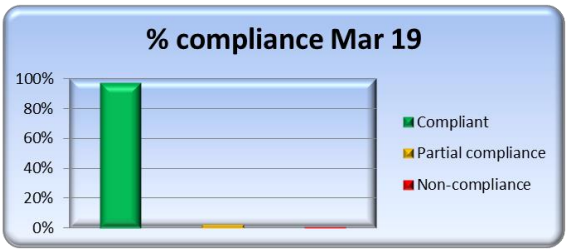
ULHT continues to acknowledge its collective responsibility for keeping to a minimum the risks of infection. This is supported by a clear governance structure and accountability that identifies a single lead for infection prevention (including cleanliness) accountable directly to the DIPC/Deputy DIPC.

Throughout the 2018/19 financial year, there were issues that affected the operational capacity of the IP&C team. These included new management, long term sickness absence, maternity leave and vacancies. The trust did as much as was reasonably practicable to ensure that sufficient resources were available to secure the effective prevention of infection. This included a secondment/fixed term opportunity (6 months) for a Lead Nurse Patient Safety / Infection Prevention and Control which, by November had become a full time substantive role as Lead Nurse covering both Infection Prevention and Tissue Viability teams.

One of the most significant pieces of work undertaken during 2018/19 was establishing closer inter-relationship working with many other teams within the trust. At an operational level, the IP&C Nurses, in partnership with the Antimicrobial Pharmacists and Microbiologists have made a sustained and significant reduction in the rate of *C.diff* cases. A fully comprehensive review of the trust compliance against the hygiene code. On a more strategic level, IP&C is now part of the Harm Free Care group which looks at reducing and preventing the risk of preventable harm to patients who use our services. There is also now more direct engagement by IP&C in other key strategic groups including Estates and Facilities capital planning groups amongst others.

There has been further progress with compliance to the Hygiene Code gap analysis action plan which consists of 135 compliance line items which the trust can now demonstrate compliance levels of 97%. This is in comparison to the initial assessment which highlighted that the trust was only 61% fully compliant with the hygiene code. Partial compliance was 24% and no evidence of compliance was identified in 14% of the code. By working to the hygiene code action plan, the trusts year end progress was significant and was able to demonstrate full compliance to 97%, partial compliance 2% and no evidence of compliance to 1%.

Overall hygiene code % compliance improvement is shown in the charts below.



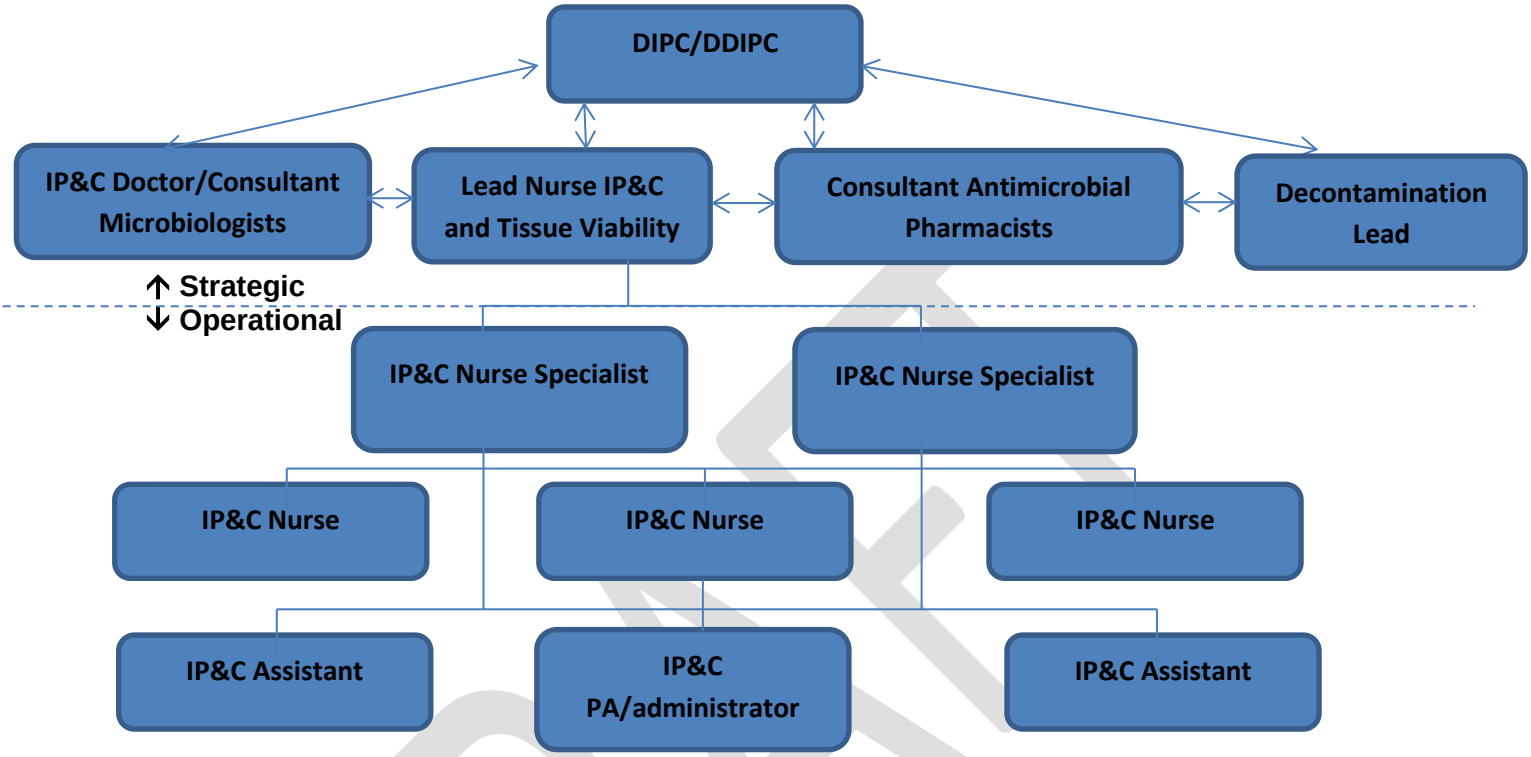
There was also good progress made against the key performance indicators listed in the IP&C service plan. This work was a key requirement for Criterion 1 and it was able to provide assurance that monitoring and management of IP&C performance was in place through an accountability framework. The service plan key performance indicators for the trust as a whole are broken down in to three distinct elements namely; the strategic element, operational element and an organisational performance element. These are set up to be monitored on a quarterly basis through the trust IP&C committee.

Throughout 2018/19 there were key achievements in managing issues such as prevention of outbreaks, participation in the gram negative bloodstream infection reduction programme and the development of effective inter-trust working relationship further enhancing the successful approaches to managing IP&C. These working relationships enabled better facilitation of operational bed management based on risk and an enhanced support to the estates and facilities directorate to enable works to be carried out with full IP&C risk assessments and controls in place.

Although the IP&C team was reorganised into a corporate model that could be utilised more effectively based on operational need, the lack of operational capacity meant that the functionality was tested and the team was able to demonstrate that despite significantly low levels of capacity, it could still maintain key priority duties to ensure that patient safety was maintained. This did however impact on the more proactive requirements of the function such as policy updates etc.

By December 2018, out of the 3 IP&C assistant roles, one was on maternity leave and the other 2 were left vacant. The 2 vacant roles were then combined to form a Band 6 IP&C nurse role to better support Grantham site. It is hoped that this role will be recruited to by end of Quarter 1 2019/20. This will further strengthen the IP&C team as a fully corporate function The IP&C nurses within the team are also taking on key projects that support the wider trust requirements such as Surgical Site Infections and surveillance programmes. This ensures that collectively the IP&C function can grow professionally and that the service it provides is enhanced year on year at no extra cost to the trust.

The Infection Prevention and Control structure (April 2018 to December 2018) is made up of the following:



The structure was specifically designed to be used in a flexible manner to meet the needs of the Trust. There will be a priority based approach to the deployment aspect to ensure that as a corporate function, the IP&C team can be placed according to greatest need. This structure will also facilitate better consistency across sites and allows for better business continuity.

Strategic IP&C support

The main focus of the strategic element of the IP&C function was to deliver the trust strategy. This included providing assurance evidence of compliance the hygiene code. The trust was expected to deliver and sustain improvements in quality and safety. This was achieved in 2018/19 and the sustained improvements also demonstrated the capacity and resilience to maintain safety despite the operational pressures.

The Trust Wide Decontamination Lead left the organisation in December 2018 and is yet to be replaced however the Lead Nurse for IP&C supported by the IP&C Doctor is continuing to chair the Decontamination group until a person is appointed in to the role. This has also been recorded on the corporate risk register.

Operational IP&C support

The core purpose of the operational element of the IP&C function was to provide an effective and efficient IP&C support service to the trust. This included (but not limited to):

- Audit support visits to clinical areas and areas where patients access services
- Daily contact with all wards to check side room availability
- Daily support to the operational hub to aid in bed management
- Running an IP&C Link Practitioner network
- Support for Root Cause Analysis investigations relating to HCAI incidents
- IP&C advice and support for routine and reactive issues (including outbreaks etc.)
- Support for trust wide training requirements (induction and core learning etc.)
- Alert organism surveillance
- Trust wide projects and initiatives
- Support to estates and facilities for IP&C specification relating to the physical decontamination of environments.
- Support to specialty services
- To link in with the strategic aims of the function and assist with the delivery of these.
- To support the work undertaken by the medical devices decontamination services.
- Antimicrobial Audits looking specifically at 72 hour review of patients where sepsis is diagnosed or suspected.
- Weekly Cdiff/gdh ward rounds as a collaborative effort with IPC nurses, antimicrobial pharmacists and microbiologists where possible.
- Antimicrobial advice and support for all levels of prescriber and non-medical staff where requested.

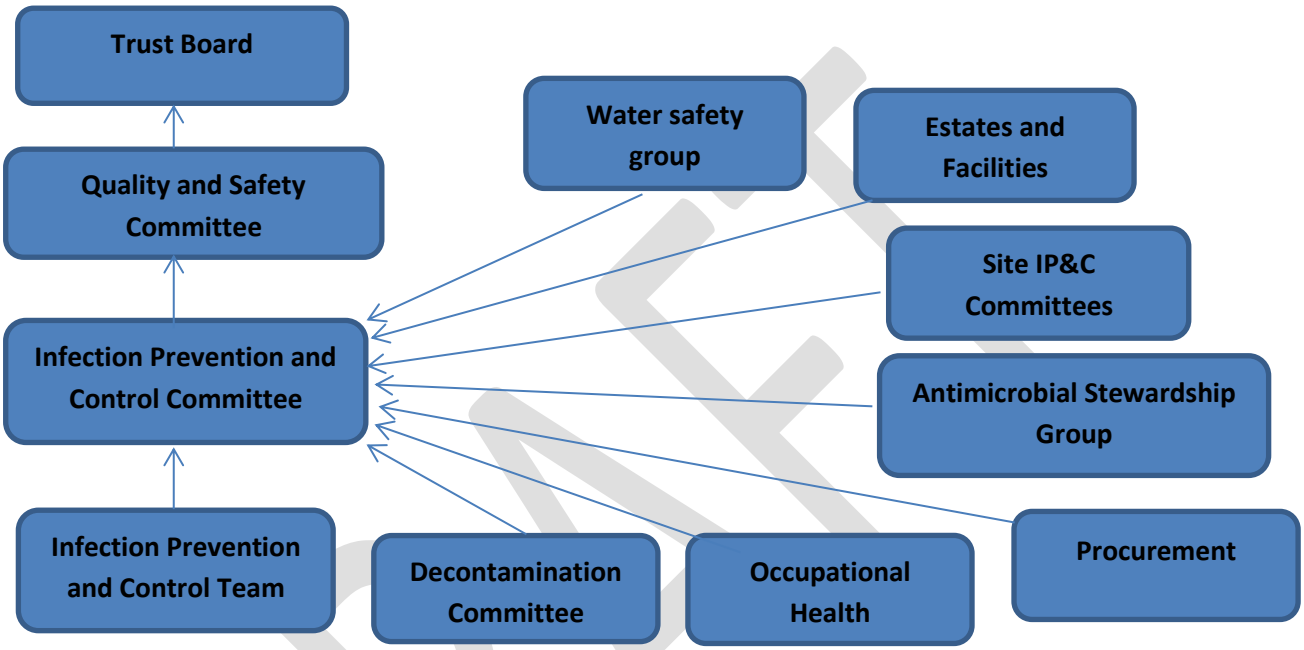
The IP&C team were highly visible and proactive within the trust and continued to develop strong working relationships aimed at improving safety and delivering a better patient experience in line with the trusts vision and ambitions. During the flu season (January to April) the IP&C team covered weekends to support clinical staff to ensure that safe care was maintained.

Governance

Throughout 2018/19 a number of reports were required by the trust to help inform the senior leadership as to the status of IP&C and the context in terms of risks. Some reports were routine (for IP&C committee and site meetings for example) while some were needed due to issues such as CQC evidence and incidents (including serious incidents). A standardised assurance reporting pathway was in place to ensure a robust process was maintained for the IP&C function.

The Antimicrobial team set up an OPAT service during this time to improve patient outcomes in reducing complications that can lead to further infection and increase microbial burden in the hospital environment which promotes spread of infection and antimicrobial resistance.

Below is a diagram illustrating the routine reporting pathway that will be in use for all strategic assurance.



Since being placed in to special measures, the Chief Executive, DIPC and Deputy DIPC have supported the trust by chairing the trust IP&C committee. This has demonstrated the importance placed on IP&C for ULHT. They have challenged performance over the year to continually push for quality and safety improvements and as a result significant gains have been achieved.

The trust IP&C committee brings together all key partners to provide assurance that effective systems and processes are in place to manage IP&C. Following each committee, an upward report was produced highlighting the key issues discussed to ensure that the trust board were made aware.

There were some key challenges noted throughout 2018/19 including management of the *Clostridium difficile* infection trajectory and high rates of blood culture contamination. Assurance was provided that demonstrated effective responses to the case rates and lessons learned that will have an impact on future rates. The following tables and narratives show the trust performance in relation to health care associated infections in 2018/19.

Surveillance

Performance data overview 2018 – 2019

The performance data for year-end shows that overall there has been a reduction in health care associated infections (HCAI) in ULHT. An internal aspiration to improve on the previous year's performance was the key driver and the trust can demonstrate a 9% reduction in the total reportable HCAI alert organism numbers.

Table showing case numbers for 2017/18 and 2018/19

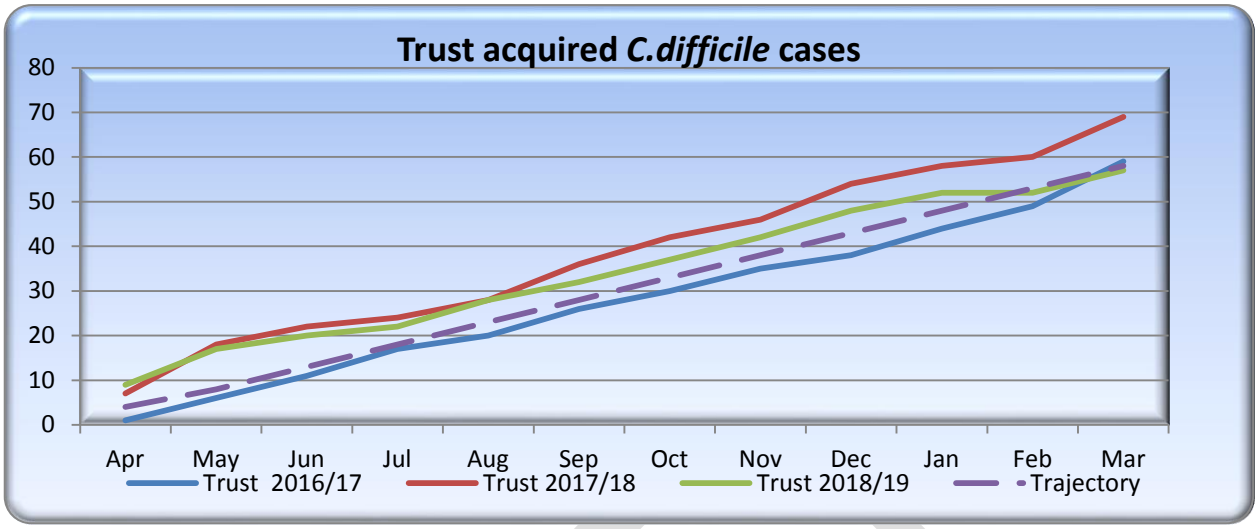
Alert organism	2017 - 2018	2018 - 2019	+/-
MRSA	2	3	+1
C.diff	69	57	-12
MSSA	17	13	-4
GNBSI	70	72	+2
Total	158	145	-13 (9%)

Clostridium difficile infections

Clostridium difficile infections 2018/19

Month	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
Trajectory	4	4	5	5	5	5	5	5	5	5	5	5	58
Performance	9	8	3	2	6	4	5	5	6	4	0	5	57
Lincoln	2	2	1	0	5	3	4	3	3	1	0	3	27
Boston	6	6	1	2	0	1	0	2	3	2	0	2	25
Grantham	1	0	1	0	1	0	1	0	0	1	0	0	5

Each of the cases was investigated and the key theme related to antibiotic prescribing. Although in most cases the antibiotics were justified and in line with the prescribing formulary, the key lesson is educating prescribers on possible alternative antibiotics that pose fewer risks for *C.diff* infection. Despite the poor start to the year in terms of rates, the trust ended the year by achieving an under trajectory result. This demonstrates significant improvements in *C.diff* management.



The chart shows the continual improvements against the expected trajectory for 2018/19 with the two previous years included for comparison.

The Antimicrobial Stewardship Strategy Group (ASSG) supported PathLinks in the review of the Adult antimicrobial Guidelines for the Trust, and review of other specialised guidelines on various infections that were submitted to Drug and Therapeutics committee. The outcome of this review has put further restrictions on high risk antibiotics for prescribers. It also offers a wider range of alternative antibiotic options throughout, in light of the various antibiotic supply shortages that presented significant challenges for patient safety and mortality in 2018-19. . This key action aligned Antimicrobial training and educational sessions for all levels of medical staff, and an extended communications drive to implement the new guidance –will help to address the issues relating to antibiotic prescribing habits within the trust. The antimicrobial team have undertaken visits to each ward to specifically alert as many medical and non-medical staff as possible, and supply sepsis and 'blue man' posters that have been developed to give a quick guide on antimicrobial recommendations for common infections. This has been well received, and is proving effective, despite the guidelines only being released at end of Jan 2019.

There have been, on occasion, deep cleans undertaken where periods of increased incidence of *C.diff* have been reported. This is despite the acknowledgement that there was no suspicion of cross-infection as there was a difference in ribotypes, however it was noted that good practice was to thoroughly clean the environment to prevent further spread.

MRSA bloodstream infections

Over the past 12 months ULHT had reported 3 cases of MRSA bloodstream infections against a trajectory of zero. All three cases were fully investigated using Root Cause Analysis (RCA) and both were deemed to be unavoidable. Although the trust reported 3 cases throughout 2018/19, ULHT was identified as low incidence organisation and as such will no longer be required to report MRSA bloodstream infections through the Public Health England Post Infection Review (PIR) process. ULHT will continue to treat MRSA bloodstream infections as a serious matter and will continue to investigate each case accordingly using the RCA process and cases will be discussed at the trust infection prevention and control committee.

Hospital attributable MSSA bloodstream infections 2018/19

The Trust returns data on the number of cases of MSSA bloodstream infections to Public Health England. Cases are labelled as either Trust attributable or community acquired: there is no annual objective for MSSA bloodstream infection cases.

MSSA Bacteraemia					
Month	Pilgrim	Lincoln	Grantham	Louth	Total
April	0	1	0	0	1
May	0	0	0	0	0
June	0	0	0	0	0
July	0	0	0	0	0
August	0	0	0	0	0
September	1	1	1	0	3
October	0	3	0	0	3
November	2	0	0	0	2
December	0	0	0	0	0
January	0	0	0	0	0
February	2	2	0	0	4
March	0	0	0	0	0
Total	5	7	1	0	13

Surgical Site Infection Surveillance

The trust has started to develop a system of robust reporting for surgical site infection surveillance that will be managed by the Surgical Division during 2019/20. This will not only meet the needs of the mandatory reporting schedule but will also form part of an improvement plan to learn lessons from any previous cases and reduce the risk of patients acquiring surgical site infections.

Gram-negative bloodstream infections

The following tables of E coli, Klebsiella and Pseudomonas bloodstream infection cases demonstrate data collected as part of the mandatory HCAI reporting to PHE. The tables demonstrate the number of trust-attributed cases of Gram-negative bloodstream infection by individual organisms for 2018/19.

No thresholds for these organisms are currently in place for acute hospital trusts. Action planning to reduce Gram-negative bloodstream infection (GNBSI) rates is being led by the CCG through the Whole Health Economy IP&C group work with the ambition of reducing Gram negative bloodstream infections by 50% by 2021.

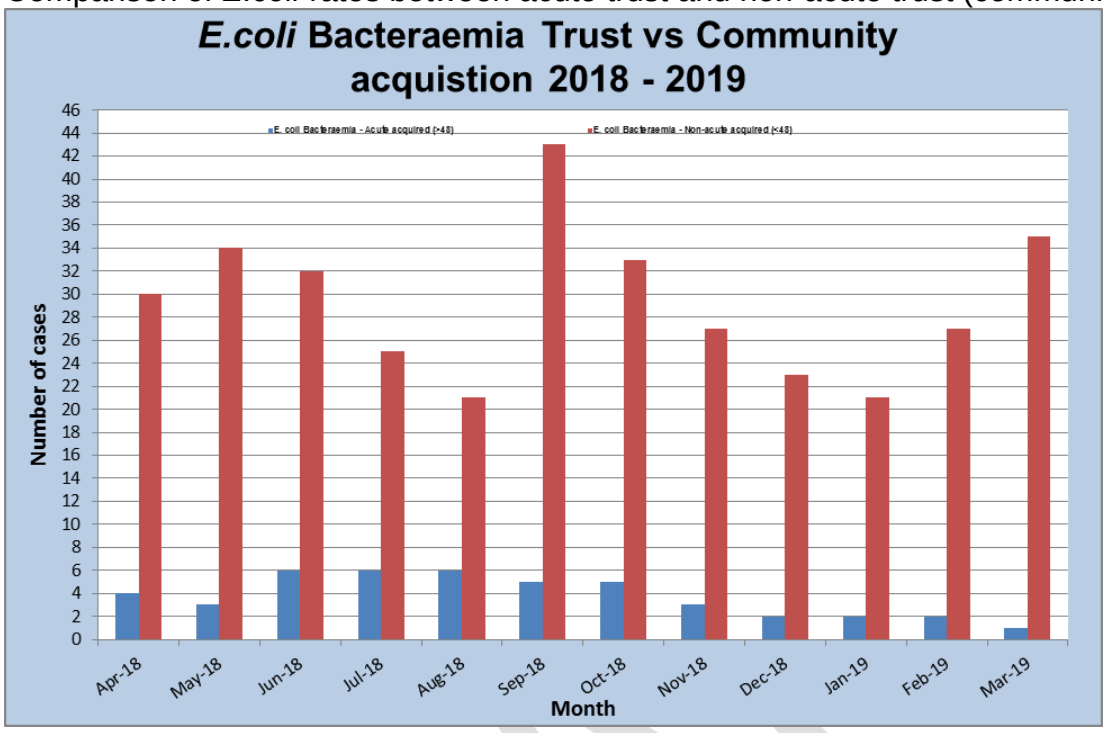
The vast majority of Gram-negative bloodstream infections are caused by *E.coli* and therefore the primary piece of work was focussed on reducing the common types of infections such as Urinary Tract Infections (UTI), Catheter Associated UTI and hepatobiliary infections.

The 2018/19 ambition for ULHT was to sustain progress against the trust GNBSI action plan which the trust achieved. A whole health economy action plan has been produced with tasks linked to respective organisations. ULHT is a key member of the whole health economy and will deliver on all agreed actions.

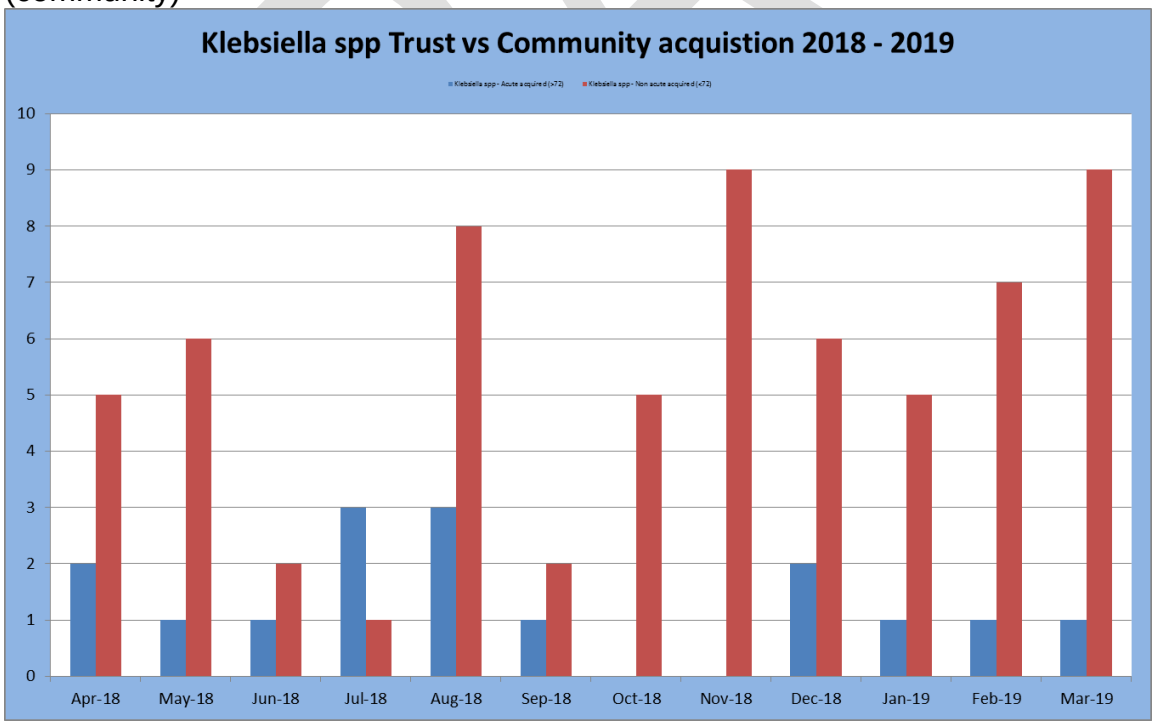
E coli 2018/19

E.coli Bacteraemia					
Month	**Pilgrim**	**Lincoln**	**Grantham**	**Louth**	**Total**
April	**1**	**3**	**0**	**0**	**4**
May	**0**	**2**	**1**	**0**	**3**
June	**2**	**4**	**0**	**0**	**6**
July	**2**	**4**	**0**	**0**	**6**
August	**0**	**5**	**1**	**0**	**6**
September	**2**	**3**	**0**	**0**	**5**
October	**2**	**3**	**0**	**0**	**5**
November	**0**	**3**	**0**	**0**	**3**
December	**0**	**2**	**0**	**0**	**2**
January	**1**	**1**	**0**	**0**	**2**
February	**0**	**2**	**0**	**0**	**2**
March	**0**	**0**	**1**	**0**	**1**
Total	**10**	**32**	**3**	**0**	**45**

Comparison of *E.coli* rates between acute trust and non-acute trust (community)

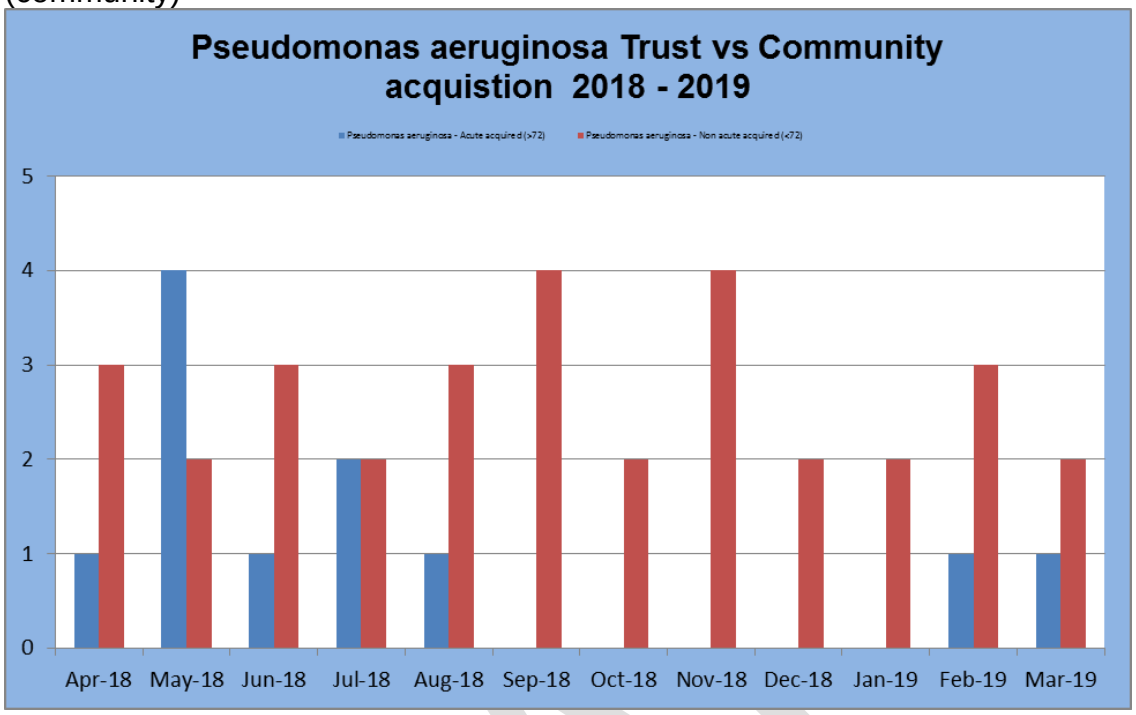


Comparison of *Klebsiella spp*. rates between acute trust and non-acute trust (community)



Comparison of *Pseudomonas aeruginosa* rates between acute trust and non-acute trust

(community)

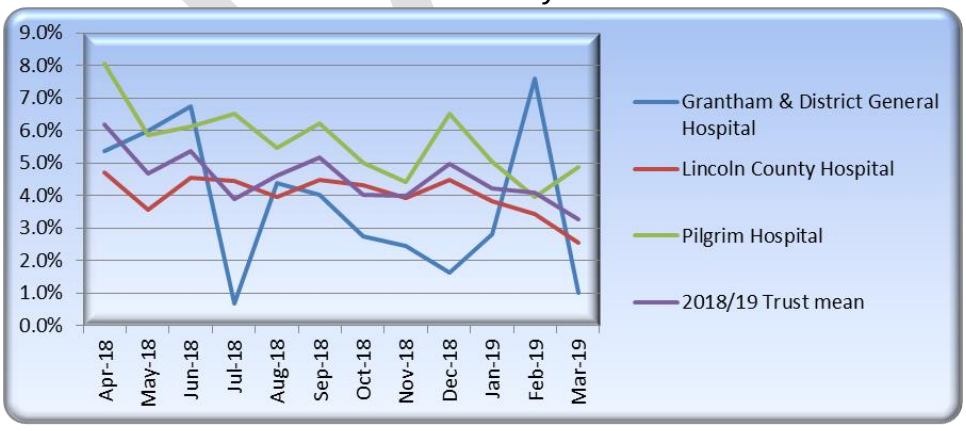


Note the relatively small case numbers of *Klebsiella spp*. and *Pseudomonas aeruginosa* in comparison to *E.coli* bloodstream infections.

Blood culture contamination rates

A national aspirational standard exists for blood culture contamination rates of 3% or below. It is also widely recognised that the national mean for acute trusts is around 5%. ULHT has seen a wide range of contaminant rates on a monthly basis however the long term trend is decreasing. Variation by site is apparent and Pilgrim site has a consistently higher rate of blood culture contamination rates in comparision to Grantham and Lincoln.

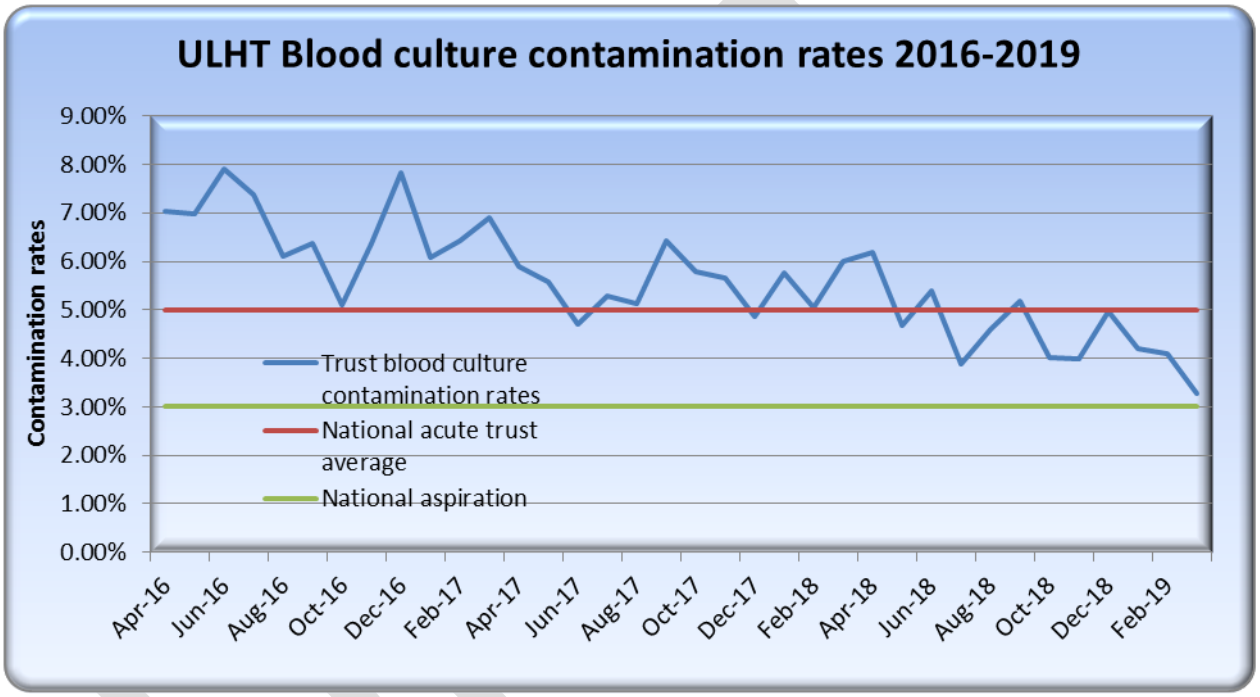
% Blood culture contamination rates by month and site 2018/19.



Blood culture contamination rates by site 2018/19

Hospital	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19
Grantham & District General Hospital	5.4%	6.0%	6.8%	0.7%	4.4%	4.0%	2.8%	2.5%	1.6%	2.8%	7.6%	1.0%
Lincoln County Hospital	4.7%	3.6%	4.6%	4.5%	4.0%	4.5%	4.3%	3.9%	4.5%	3.8%	3.4%	2.5%
Pilgrim Hospital	8.1%	5.9%	6.1%	6.5%	5.5%	6.2%	5.0%	4.4%	6.5%	5.0%	4.00%	4.9%
2018/19 Trust mean	6.2%	4.7%	5.4%	3.9%	4.6%	5.2%	4.0%	4.0%	5.00%	4.2%	4.1%	3.3%

Overall trust wide trend for % blood culture contamination rates



Blood culture contamination rates have significantly decreased especially over the past year and the trust is close to the national aspiration of 3% and well below the national acute trust average of 5%. This is a decrease from a trust mean of 8% in June 2016 and a site specific high of 11%.

There has been a focus placed on driving the contamination rates down through having dedicated blood culture packs, enhanced ANTT training by the Clinical Education team and challenges to ward and department managers from the DIP&C via the trust IP&C committee site meeting feedback. The IP&C team has supported the reduction through visits and audits and the culmination of the joint working programme is evident in the long term trend towards 3%.

Criterion 2: Provide and maintain a clean and appropriate environment in

managed premises that facilitates the prevention and control of infections.

Cleanliness

Continuous measurement and management of performance of Estates and Facility Services is fundamental in the control of hospital acquired infection. Cleanliness remains high on the Trust agenda and regular meetings have continued to be held at all levels of the organisation. The monitoring of clinical areas has been undertaken by the Facilities Department on a weekly and monthly basis following the National Standards of Cleanliness guidelines (2007) using "MiC4C", which is a cleanliness monitoring software product. The results are then fed back to Ward and Department Leaders, Matrons, Heads of Nursing and the Infection Prevention Team (IPT). The scores and any actions required have been discussed at the site IP meetings as well as the Trust IP Committee meeting. Louth is now added to the system and auditing is due to commence in June.

Housekeeping Review

Following the Housekeeping review and the subsequent Business Case and additional funding, the transfer of the entire ward housekeeping staff to Facilities was completed by February 2019. Initial challenges were the volume of vacancies that were inherited and recruitment on all 3 sites has been undertaken. Further monitoring of the transfer and opportunities for improved standards and cost savings will be progressed.

Deep Clean Programme

The situation remains the same as reported last year, without the facility to decant wards we can only carry out a bay by bay or room by room deep clean.

Waste Management

The trust is required to complete a Pre Acceptance Audit for all sites annually to ensure it remains compliant with regard to Waste Segregation. The audit was completed in October 2018 and forwarded to SRCL, the Clinical Waste Contractor. The information was checked by the company's compliance department, which is a mandatory requirement for the Environmental Agency.

PLACE

PLACE aims to promote the principles established by the NHS Constitution that focus on areas that matter to patients, families and carers:

- Putting patients first;
- Active feedback from the public, patients and staff;
- Adhering to basics of quality care;
- Ensuring services are provided in a clean and safe environment that is fit for purpose.

Notice of the assessment was given by HSCIS in February with all assessments having

to be completed and the results entered by early May.

Results

The results were released on 16th August and are available to the public on the NHS Digital website. Improvements were seen across organisation food, dementia and disability in 2018, the results for ULHT against last year are:

Criteria	Organisational Average			National Average	
	2018	*2017*		***2018***	*2017*
Cleanliness	**93.84%**	*95.56%*		***98.5%***	*98.4%*
Food & Hydration	**89.68%**	*91.47%*		***90.2%***	*89.7%*
Organisation Food	**93.26%**	*90.35%*			*88.8%*
Ward Food	**88.89%**	*91.79%*			*90.2%*
Privacy, Dignity & Wellbeing	**78.12%**	*80.06%*		***84.2%***	*83.7%*
Condition, Maintenance & Appearance	**88.70%**	*91.21%*		***94.3%***	*94.0%*
Dementia	**70.13%**	*64.64%*		***78.9%***	*76.7%*
Disability	**78.43%**	*75.30*		***84.2%***	*82.6%*

The results by site against last year are:

Criteria	Grantham		Lincoln		Pilgrim		Louth	
	2018	*2017*	**2018**	*2017*	**2018**	*2017*	**2018**	*2017*
Cleanliness	**93.38%** ↑	*88.43%*	**94.75%** ↓	*96.05%*	**92.65%** ↓	*96.33%*	**91.39%** ↓	*97.37%*
Food & Hydration	**84.39%** ↓	*92.97%*	**91.00%** ↑	*90.59%*	**88.78%** ↓	*92.63%*	**92.84%**	*n/a*
Organisation Food	**92.85%** ↑	*90.35%*	**93.70%** ↑	*90.35%*	**92.85%** ↑	*90.35%*	**88.49%**	*n/a*
Ward Food	**82.09%**	*93.97%*	**90.38%**	*90.64%*	**87.91%**	*93.24%*	**97.07%**	*n/a*

	↓		→					
Privacy, Dignity & Wellbeing	**70.67%** ↓	*77.95%*	**81.08%** ↑	*80.82%*	**75.61%** ↓	*79.65%*	**68.98%** ↓	*71.72%*
Condition, Maintenance & Appearance	**85.38%** ↑	*83.20%*	**87.91%** ↓	*90.37%*	**90.90%** ↓	*95.73%*	**80.21%** ↑	*65.68%*
Dementia	**60.21%** ↑	*58.58%*	**70.64%** ↑	*64.64%*	**71.60%** ↑	*67.25%*	**69.87%** ↑	*50.65%*
Disability	**71.47%** ↑	*67.95%*	**76.57%** ↑	*73.55%*	**82.93%** ↑	*80.66%*	**73.96%** ↑	*61.90%*

Observations

Cleanliness

The standard of cleanliness was generally perceived to be good, however issues were found across the Trust in some areas. Our score was 4.6% below the National Average and this left us 148th out of 152 Acute Trusts, which reflects the high standards required for cleanliness. The inclusion of communal areas at Louth this year contributed to the small drop in percentage from 2018.

Food Service

ULHT are around the National Average for this domain, standing at 87th of 152 Acute Trusts. Food service scores declined at Grantham and Pilgrim this year. Whilst we are above the national Average for Organisational Food (menu choices, meal timings etc.) we are slightly below the National Average for Ward Food (service and quality of food). Issues were found on some wards with the food service, a new Food Service mandatory e-learning programme has been developed to raise awareness of good food service standards. The quality of food was generally of a good standard.

Privacy, Dignity and Well Being

ULHT are 6% below the National Average for this criteria and 117th out of 152 Acute Trusts. Issues which impacted on the score were the lack of treatment rooms on wards for minor procedures, limited access to TV and radio in some wards, nowhere across the Trust providing lockable storage space for patients, privacy curtains not installed around all baths/showers and insufficient space around reception desks resulting in patient and staff conversations being overheard.

Positive comments were noted regarding single sex areas including toilets and bathrooms, adequate space provided around beds and patients being dressed appropriately.

Condition, Maintenance and Appearance

ULHT are 5.6% below the National Average and 142nd out of 152 Acute Trusts. There was a mixture of results with some of the newly refurbished wards scoring 100%, but the older buildings reduced the overall percentage. Improvements where seen at Louth with the ongoing improvement works taking place.

Dementia

The score for these criteria is 8.7% below the National Average. The score again improved this year with the refurbishment of some wards and a better understanding of the criteria by the assessors. As further refurbishments take place we expect to see this score increase.

Disability

ULHT are 5.7% below the National Average, and 115th out of 152 Acute Trusts. Issues being noted included no hand rails in corridors and reception/waiting areas not providing seating for a range of patient needs in some departments.

Action
Reports have been submitted to ET and Trust board and a Trust action plan in relation to PLACE has been developed and will be worked through jointly by the Facilities team and Corporate Nursing.

Water Safety Group
Many of the challenges presented to ULH in respect of water 2018/2019 have been achieved and this has resulted in some significant improvements in water quality at all three main sites.

There remain a number of key challenges which have carried through from 2018/2019 into 2019/2020. Perhaps the greatest of these is managing an ageing water

infrastructure which has the potential to impact on both hot and cold water systems. Recently identified issues in respect of drainage will also most likely create further challenges through 2019/2020.

The key achievements through 2018/2019 were:-

1) Significant improvement in water quality allowing for the removal of the majority of Point Of Use filters - typically a >90% reduction.

2) Completion of schematic drawings for all three sites and the on-going new risk assessments which will be to the new BS8580-Part 1:2019 standards.

3) Implementation of a shower hose and shower head replacement programme, which is completed quarterly and is providing substantial improvements in water quality for patients, with the additional benefit of financial savings.

4) A return to normal flushing protocols across all sites, seeking to reduce both the impact on the environment and the burden on housekeeping.

5) Water hygiene awareness training has been well received by ULH Housekeeping and their greater understanding of the necessity to manage water correctly has demonstrated improvements in hygiene standards across all disciplines.

6) Maintaining the focus on TMV planned maintenance has been recognised as an essential factor in Legionella and Pseudomonas management with a 2019/2020 contract in place to ensure the integrity of these devices is maintained.

There remain a number of key “work in progress” areas that require careful monitoring on water micro-biology and remain an essential ingredient to be completed during the coming year: -

1) Pilgrim new water main and associated water tank infra-structure.

2) Grantham Energy Centre and site water temperature issues.

3) Underutilisation of bathrooms/wet rooms being used as storage areas significantly creating deterioration in water microbiology and a high risk potential of having to return to POU filters to manage the impact this creates.

4) Far too many “Out of Use” signs on toilets/bathrooms, again creating the same issues as (3) above.

The Water Safety Group, which has been meeting on a monthly basis as part of the management strategy has now reduced meetings to 6 per annum. This is a very strong

reflection on the impact this group has had on "getting the job done" and the water quality improvements attained. Unfortunately, the WSG has a strong Estates bias and during 2019/2020 greater attendance and involvement it's needed from nursing, IPC and housekeeping.
The WSG must be a multi-discipline group to ensure "work in progress" areas are transformed into achievements.
Both Legionella and Pseudomonas water testing results have recorded steady improvements. There have been a number of excursions where failures have been identified but in the majority of cases a rapid response and intervention by the estates team has resolved the issue. The surveillance programme remains in place and unless challenged by external influences would expect to see the current levels maintained.

Design, construction, renovation and refurbishment programme
The IPT has continued to contribute to the design, construction and renovation projects across the Trust as requested by Estates. In line with HBN 00-09 "Infection Control in the Built Environment" as part of ward/department refurbishments and the fire improvement works the opportunity has been taken to upgrade wash hand basins/taps and other water related items to assist with the provision of safe water services.

Criterion 3: Ensure appropriate antimicrobial use to optimise patient outcomes and to reduce the risk of adverse events and antimicrobial resistance

The Trust Antimicrobial Stewardship Strategy Group (ASSG) is set up in line with recommendations from criterion 3 of the Hygiene code, and NICE NG15, since 2016. The forum allows dialogue with clinicians, PathLinks, primary care around antimicrobials specifically.
This forum has gained recognition within the Trust for its function in setting and overseeing the Antimicrobial Stewardship Programme for ULHT. Existing committees within the Trust are unable to provide the time required for focussing on details of stewardship, therefore this was set up as a new body, with VC access to the three main sites. The meetings are held once monthly, lasting approximately 1 hour, and minutes are disseminated to relevant forums including Drug and Therapeutics, Medicines Optimisation and Safety Committee. The ASSG reports to IPCC every month and through this structure can escalate key issues to Trust Board level as a representative of the DIPC is in attendance and the Antimicrobial Pharmacy Team ensures attendance at IPCC (co-chaired by the DIPC). Attendance at ASSG has been poor over 2017/18, and therefore largely non-quorate, with limited opportunity for the senior Antimicrobial Pharmacist to tackle this as 0.5wte, in the absence of the Consultant Antimicrobial Pharmacist.

This is something that is being addressed as a matter of priority with review of the Terms of reference as a starting point, and promoting the value of the forum to key staff groups

who will have valuable contributions (i.e., sepsis practitioners, critical care outreach team).

There is regular attendance from the Lead Clinical Representative for Theatres and Intensive care at LCH site and ASSG has recently welcomed a Lead Clinical Representative for Medical Specialties from GDH site. Further work to do on securing a Lead Clinical Representative from PHB site, preferably for Surgical Specialties as this is currently lacking at ASSG, and increasing engagement and support from clinical specialties in general. Over 2018/19 ASSG has also lost its Lead Clinical Representative for Paediatrics (they no longer work for the Trust). Current issues with staffing and service planning for Paediatrics at ULHT have meant this is not a good time to seek such commitment, but it is on the agenda for the year going forward, and will be pivotal in overseeing the process of guideline review for Paediatrics.

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In addition to the Trust Antimicrobial Guidelines devised by PathLinks and the various local guidance on managing specific infections, there is a Trust Antimicrobial Prescribing Policy which covers the main aspects of prudent antimicrobial prescribing, with information and direction on penicillin allergy, documenting appropriate indication, documenting antimicrobial review, pharmacy supplies of restricted antimicrobials, how to obtain urgent antimicrobials during (and out of) pharmacy hours, etc. The policy directs prescribers to follow guidelines where they are seeking antimicrobial choices for management of infections, as they reflect national and local resistance patterns. The policy has been developed taking into account national guidance, patient safety alerts from PHE, national legislation and toolkits, local guidelines and policies.

Whilst it is unlikely that the policy is read with enthusiasm on induction, it has certainly been utilised by pharmacy in enforcing key decisions (only supplying 24 hours of a restricted antimicrobial where outside of guidelines and microbiologist approval not documented). The policy was due for review mid-2018, at which point further elaborations will be made with regards to what should go into the Day 3 antimicrobial prescribing review, incorporating the expectations of the SEPSIS AMR CQUIN. There will also be more advice around use of restricted antimicrobials and some insight into surveillance across the Trust. Adherence to prescribing guidance was audited as part of the annual antimicrobial audit 2018 (as detailed given earlier), which also includes compliance with hospital post prescribing review at 48-72 hours. This review is commonly referred to as the Day 3 prescribing decision at ULHT, mainly due to this being how it was promoted, with the idea of being undertaken within 3 days of initiating antibiotics for an infection. There have also been quarterly audits undertaken to assess compliance for sepsis management including 72 hour review. These have all been escalated via IPCC at least and back to commissioners as part of national CQUIN requirements, but feedback to prescribers has been severely limited due to lack of staffing resource over the year.

This will be much improved now that the team is back to 1.5wte and anticipating a

successful business case for support. Benchmarking has been used to demonstrate progress in antimicrobial stewardship, but this has been mainly for interrogation at ASSG, for the same reason. This includes benchmarking against other Trusts and within ULHT. Commissioners are also able to access information relating to markers of antimicrobial stewardship via the Fingertips website, managed by PHE.

Criterion 4: Provide suitable and 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

The ULHT IP&C team has developed a set of patient information leaflets, care documents and up to date information on the trust website that provides advice, support information and contact details for patients and visitors needing further support.

All patient information has been ratified through the relevant governance processes prior to being issued to ensure that it is user friendly and fit for purpose. A catheter passport was developed by the Lincolnshire Whole Health Economy IP&C group which has enables all patients and service users to hold their own catheter information so that whichever service they need to access, the care providers have an up to date record of details relating to the catheter management plan.

The trust website has a dedicated page for infection prevention giving advice on matters such as hand hygiene and the latest infections data. The annual reports can also be found on this page. This demonstrates the transparency of the organisation to provide 'live' information on a public facing platform.

There is a leaflet on the general principles on the prevention of infection which is available in other languages, large print, audio and braille formats via the Public Involvement Team. Other leaflets include information on reporting concerns relating to hygiene and cleanliness including hand hygiene, MRSA, Clostridium difficile. GDH, Isolation precautions and use of antibiotics.


advice or ask to speak to a member of the Infection Prevention Team.

Patient Advice and Liaison Service (PALS)
PALS offers confidential information, support and advice on health related matters. Contact can be made either by telephone, email or in person and PALS staff can visit patients on wards.

The contact details are:

Lincoln County Hospital
Located near main reception
Telephone (01522) 707071

Grantham and District Hospital
Located next to Ward 6
Telephone: (01476) 464861

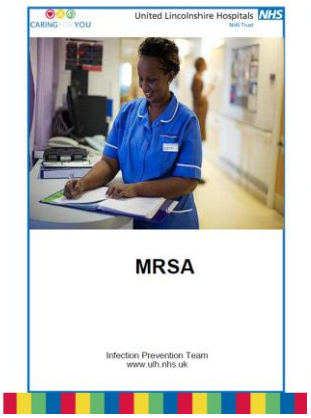
Pilgrim Hospital, Boston
Located in main reception
Telephone: (01205) 446243

Email: pals@ulh.nhs.uk

References
If you require a full list of references for this leaflet please email patient.information@ulh.nhs.uk

The Trust endeavours to ensure that the information given here is accurate and impartial.

If you require this information in another language, large print, audio (CD or tape) or braille, please email the Patient Information team at patient.information@ulh.nhs.uk



What the hospital is doing
The prevention of infection is a priority for United Lincolnshire Hospitals NHS Trust. To prevent Clostridium difficile infections, we:

- train staff to wash their hands and equipment correctly
- ensure staff are "bare below the elbows" and wash their hands before and after each time they touch a patient or the patient's environment
- screen patients for Clostridium difficile if they are admitted with or develop diarrhoea
- isolate patients who have been found to have Clostridium difficile in a side room and provide treatment if required
- monitor standards of hygiene in all wards and departments
- encourage visitors to wash their hands before and after visiting wards (hand hygiene stations (alcohol gel) are found outside every ward)

If you have any questions or concerns, please ask your nurse for advice or ask to speak to a member of the Infection Prevention Team.

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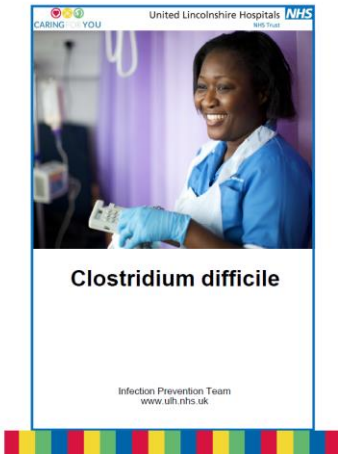


Criterion 5: Ensure that people who have or develop an infection are identified promptly and receive the appropriate treatment and care to reduce the risk of passing infection to other people

The trust DIPC, Deputy DIPC and Lead Nurse for Infection Prevention and Tissue Viability for ULHT recognised that having site based teams with specific areas of responsibility could leave the organisation vulnerable if the IP&C team had a period of reduced capacity (vacancies, long term sickness etc.) or if site pressures / incidents increased demand for the service. As part of the new service plan and strategy, the current structure of the IP&C team has been amended in a way that better serves the organisation. This means that more 'corporate' approach can be used to cover all sites as the situation demands. This has provided a degree of protection for clinical services no matter where they may be located.

Although the IP&C team are available during normal working hours to provide advice and support, ULHT has 24hr access to a microbiologist for out of hours IP&C advice. The IP&C team also support operational matters by attending daily bed meetings and by providing a daily side room availability assessment for use by the operations teams.

The trust is a key member of the whole health economy IP&C structure and works closely with external partners (such as PHE, CCG and NHS Improvement) to ensure they given up to date and relevant information on any outbreaks and incidents. Throughout 2018/19, all partners were kept informed of any events where needed and local working partners are members of the trusts IP&C committee.

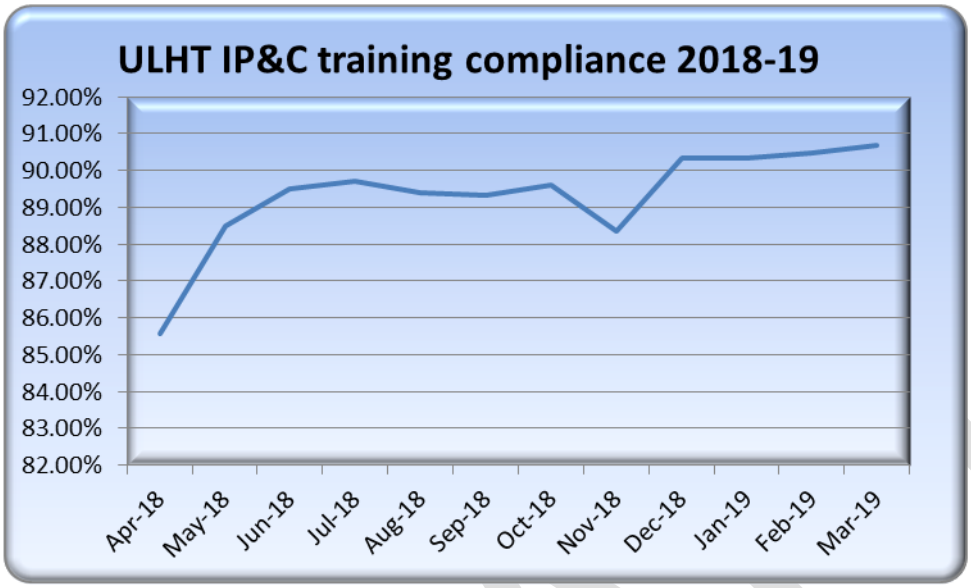
Criterion 6: Ensure all staff and those employed to provide care in all settings are fully involved in the process of preventing and controlling infection

Training

2018/19 has seen a marked improvement in the level of training compliance by ULHT staff for IP&C. In 2017/18 the trust achieved 85% compliance whereas year end compliance for 2018/19 showed compliance above the minimum level of 90%. The team is now fully embedded with core and induction training (face to face) and the e-learning pack has been updated. The IP&C also target clinical areas to encourage staff to maintain competency by undertaking their core training.

IP&C core learning compliances 2018/19

Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19
85.56%	88.48%	89.48%	89.71%	89.39%	89.31%	89.61%	88.34%	90.33%	90.34%	90.47%	90.69%



Aseptic Non-Touch Technique (ANTT)

As part of the overall hygiene code gap analysis work, it was identified that specific ANTT training had not been delivered to the trusts clinical staff for a number of years. It was therefore decided that the IP&C team would purchase the ANTT training packs for 2018/19 and support the delivery process via the Clinical Educators to the clinical teams throughout the organisation to ensure that a robust and sustainable system of training and competency assessment is in place.

Infection Prevention Link practitioners

Infection Prevention Link's (IPL's) are registered nurses or healthcare support staff and multi-disciplinary team (MDT) members. All have an interest in infection prevention and work as a link between the infection prevention specialist service and their clinical area. Many areas have chosen to have more than one staff member sharing the role and they are nominated by the senior nurse or professional within the clinical area. The IPL's come from a range of different clinical disciplines, and are fundamental to successfully implementing and embedding ownership at ward or department level. They play a key role in informing, educating and supporting their colleagues in the clinical area. They also undertake frequent audits of key aspects of clinical practice.

During 2018-19 IPL's study days were held on a quarterly basis for the trust IPL's,

rotating the venue between hospital sites. These days provide focussed education, networking with colleagues and keep the IPL's updated with relevant issues internally, locally and nationally. They also provide a forum for exchanging ideas, sharing best practice and for discussion around key issues.

The IPL model will be further enhanced as part of the ongoing IP&C service improvements by developing an IPL 'contract'. This will put in place a defined role for the IP&C IPL, building in protected time for support in their respective areas, opportunities for learning and development and is of enormous benefit to their respective areas. In return it is expected that the IPL will be able to demonstrate how they used their protected time and those areas with nominated IPL's will be expected to send representatives to at least 3 out of the 4 quarterly meetings. The ILP role will be reviewed every 2 years to ensure that it remains effective.

Contracted workers

All contracted workers working in any of the trust sites are expected to complete an induction. This includes an IP&C element and the IP&C work closely with the Estates and Facilities teams to ensure that risk assessments and controls are in place prior to any works being undertaken in with the national standards (Health Building Note HBN 00-09 Infection Control in the built environment). The IP&C team have produced a specific risk matrix to support contracted workers in the trust to ensure that they have the required controls in place to protect patients prior to commencing planned works.

The IP&C team responds rapidly to any breaches in controls that may affect patient safety and works with managers, estates and facilities and contractors to resolve any IP&C related issues.

Criterion 7: Provide and secure adequate isolation facilities

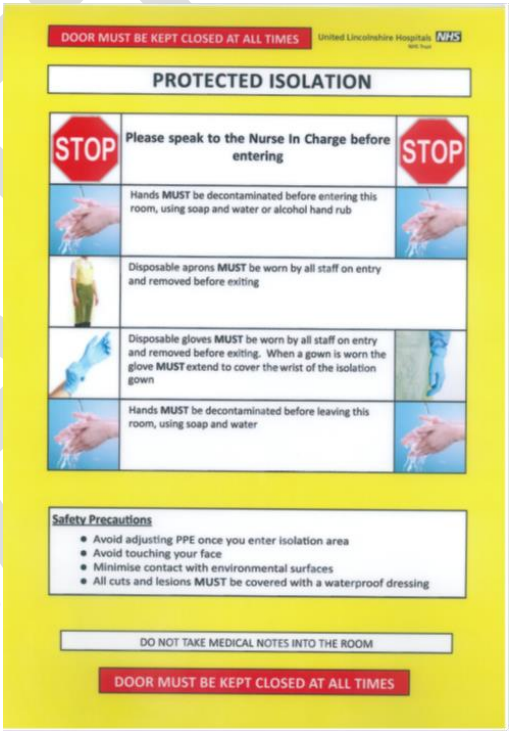
It is widely recognised within ULHT that there is a lack of side room availability and the ability to cohort patients during outbreaks. This is largely due to the ageing estate and would have required a significant investment and refurbishment to overcome. In recent years this has had a direct impact on outbreak management decisions and as a result alternative plans were needed to address this problem.

In 2018/19 a revised plan was implemented that focussed on better management of the current facilities during outbreak management scenarios. Emphasis was placed on having a risk based approach to side room usage so that if isolation facilities were required urgently, lower risk patients could be safely transferred to other beds and

managed appropriately.

In addition to the revised plan, the IP&C team now attend daily bed management meetings and provide a full side room availability sheet which is based on IP&C risk assessment so that operational teams can clearly see who can moved out of side rooms at relatively short notice.

To further aid risk based decision making, colour coded door cards are available for side rooms depending on the type of infection. These cards are available to all inpatient areas.



To further enhance the multi-disciplinary approach to better isolation management (especially out of hours), the lead nurse for IP&C delivered a 'time out day' training session to the trusts site duty managers so that a better understanding of the issues around isolation and how to use the colour coded door cards as a guide to risk assessments could be discussed and resolved.

Some of the most vulnerable areas for outbreaks in hospitals are in admissions units. These units ten to have large bed numbers and cannot be easily closed to admissions due to operational pressures. Many patients are admitted with infectious symptoms and the disease can spread before effective isolation can take place. In MEAU on Lincoln site, this was been acknowledged as particular problem. There were plans and funding put in place to fit doors to the bays of the assessments area in 2018 so that cohort nursing can take place without the need to close the entire unit. These works are now complete.

Criterion 8: Secure adequate access to laboratory support as appropriate

Eliminating avoidable healthcare associated infection is a key priority for ULHT. This aim is supported by the Path Links microbiology service including the clinical microbiologists. Ongoing microbiologist involvement includes support for day to day and strategic IP&C activity.

Microbiology laboratory and clinical services are provided by Path Links which is a partnership between ULHT and North Lincolnshire and Goole NHS trust (NLG), which is

the host organisation. Microbiology laboratories are sited at Boston and Scunthorpe hospitals.

Following rigorous inspections earlier in the year, Path Links achieved UKAS accreditation to ISO15189 from 26/9/18. Surveillance visits have taken place in March 2019 – the outcome is awaited but anticipated to be successful. Comprehensive laboratory protocols can be made available on request, and these are based on the UK standards for microbiology investigations (SMI). Regular laboratory audits are carried out to ensure compliance with the standards; reports are available on request. Turnaround times are agreed with commissioners, and national standard KPIs are monitored and reported to the relevant bodies. Reference laboratory work was put out to tender and routine reference samples are now being sent to Viapath.

During 2018/19 the microbiology service introduced cartridge-based PCR testing for influenza and norovirus, achieving an improvement in turnaround times that resulted in a significant clinical impact. The consequent improvement in isolation and hospital flows was demonstrated for NLG trust, and a poster was presented at the Federation of Infection Societies conference in November. Although the data was not formally collected, a similar improvement was noted for ULH patients.

Microbiology clinical staffing has improved during the last year. There are now 4.6WTE substantive consultants, with a 0.4WTE long term locum. A full time specialty doctor has been recruited, and is based on the Lincoln site. Each WTE microbiology post has 1PA weekly dedicated to IP&C activity, split between NLaG and ULHT. There is still a 1.0WTE vacancy, but like many other microbiology services, we have struggled to recruit into it. The duty rotas are integrated, meaning that during office hours there were two consultant microbiologists entirely dedicated to providing urgent clinical advice and laboratory liaison. There continues to be 24/7 cover for clinical, laboratory and infection prevention advice. Clinical support if offered to primary and secondary care across Lincolnshire and North Lincolnshire, from the Humber to the Wash, including support to IPC and occupational health services. During this year, the adult antimicrobial formulary has had a full formal review, and this will be replicated next year for the paediatric formulary.

The nominated lead infection prevention doctor for ULHT is Bethan Stoddart. Ongoing microbiologist involvement includes support for day to day and strategic IP&C activity, and there is a close working relationship between the IPC doctor and the lead IPC nurse and the antimicrobial pharmacists. The IPC doctor aims to be involved in all aspects, including water safety, antibiotic stewardship and decontamination. Once a lead for decontamination has been nominated, there will be a need to develop the decontamination governance structure further.

The principle objectives for the clinical microbiology department in support of IP&C for

the coming year are:

- Continue the cartridge based PCR system for norovirus and influenza testing, and in partnership with the IP teams consider widening the repertoire to include Clostridium difficile, Gram negative resistance screening and any other appropriate PCR
- Introduction of MALDI-TOF and automated sensitivity testing
- Recruitment to the vacant consultant post
- Undertake a full review of the paediatric antimicrobial formulary

Criterion 9: Have and adhere to policies designated for the individual's care that will help to prevent and control infections

The ULHT IP&C team hold a number of separate policies that make up the trust IP&C manual. This is readily available in the trust intranet and the policies are updated as and when required using a policy management matrix. There are 5 sections of policy within the manual and all are listed in this report.

Section 1

1.04 Infection Prevention Surveillance Policy Surveillance of healthcare acquired infections (part of the infection control manual). Formerly 2.19.
1.05 Infectious Outbreak / Incident Policy including Major Outbreak Contingency plan for the outbreak of infection (part of the infection control manual) Formerly 1.12.
1.06 Infection Prevention and Control Policy for Antimicrobial Prescribing To provide a framework for Trust staff to ensure the safe and appropriate prescribing of antimicrobials to reduce the risk of infection from MRSA, other resistant bacteria and Clostridium difficile and maintain the effectiveness of antimicrobial agents in the treatment of infections by reducing the risk of bacteria developing antimicrobial resistance. Formerly 3.16.
1.07 Personal Protective Equipment for Infection Prevention and Control Policy Universal standard infection control precautions (part of the infection control manual. Formerly 1.03.
1.08 Hand Hygiene Policy Hand hygiene guidelines (part of the infection control manual. Formerly 1.05.
1.10 Aseptic Non-Touch Technique Policy Aseptic non touch technique policy (part of the infection control manual). Formerly 1.06
1.13 Blood Culture Protocol

Protocol to reduce the risk of blood culture contamination and standardise practice in accordance with best practice recommendations.

Section 2

2.01 Guidelines for the control of Meticillin-Resistant Staphylococcus Aureus (MRSA) Guidelines for the control of meticillin-resistant staphylococcus aureus (MRSA) (part of the infection control manual). Formerly 2.02.
2.02 Guidance on the Infection Prevention and Control Management of Carbapenemase Producing Enterobacteriaceae (CPE) This guideline represents the ULHT response to the challenge of CPE. Formerly 2.23.
2.03 Policy for the Prevention and Control of Multi–Drug Resistant Gram-Negative Bacteria Formerly 2.17 Control of multiply-resistant micro-organisms including Vancomycin-resistant enterococcus (VRE).
2.04 Guidelines for the prevention and control of group A streptococcal infection Article from 2011 outlining the guidelines for the prevention and control of group A streptococcal infection. Formerly 3.22.
2.06 (GDH) Glutamate Dehydrogenase (GDH) Positive Nursing Guideline The contents of this guide applies to all nurses and members of the multi-disciplinary team (MDT) involved in the management of patients whose stool sample is positive for Clostridium difficile Glutamate Dehydrogenase (GDH) but toxin has not been detected.
2.06 Guideline for the management of patients with Clostridium difficile Infection The purpose of this guideline is to highlight the action than needs to be taken when a diagnosis of Clostridium difficile disease is suspected or proven. This guide should be used in conjunction with trust policies on infection prevention and control and the antibiotic formulary and prescribing advice. Formerly 1.14b.
2.07 Policy for the management of suspected and/or confirmed Norovirus cases This document is part of the Infection Control Manual which details the management of suspected and/or confirmed Norovirus cases (formerly 1.15).
2.09 Suspected or Confirmed Respiratory Tract Infection Policy

This policy is intended to provide some general principles of isolation precautions required for patients with suspected or confirmed respiratory infection, why they are required and the rationale behind their use for the reduction and prevention of infections.
2.12 Post-Cataract Operation Endophthalmitis Protocol Post-Cataract Operation Endophthalmitis Protocol (part of the infection control manual). Formerly 3.01.
2.13 Management & control of PVL associated staphylococcal infections Management & control of PVL associated staphylococcal infections (part of the infection control manual). Formerly 2.21.
2.14 Management of Patients with Scabies Scabies prevention and control (part of the infection control manual). Formerly 1.11.
2.15 Management of Patients with chickenpox and shingles Infection control issues associated with chickenpox and shingles in patients and staff (part of the infection control manual). Formerly 2.09.
2.18 Guidelines on the management of patients with or at risk of Transmissible Spongiform Encephalopathies (e.g. Creutzfeldt-Jakob disease [CJD or vCJD]) with regard to Infection Control Guidelines on the management of patients with or at risk of Transmissible Spongiform Encephalopathies (e.g. Creutzfeldt-Jakob disease [CJD and vCJD]) with regard to infection control. Formerly 2.07
2.19 Management of Patients with Hazard Group/Category 4 Pathogens in particular Viral Haemorrhagic Fevers and Hendra and Nipah Virus Infections Viral haemorrhagic fevers (part of the infection control manual). Formerly 2.12.

Section 3

3.01 Isolation methods of communicable infections Isolation methods of communicable infections. Formerly 1.08
3.03 Management of Elective Orthopaedic & Vascular Patients in Ring Fenced Beds The purpose of this guideline is to highlight the action that needs to be taken when patients are admitted to the elective Orthopaedic wards – Neustadt-Welton Lincoln and 3A Boston and Vascular 5B at Boston. This guide should be used in conjunction with Trust policies on infection prevention and control and the antibiotic formulary and prescribing advice.
3.07 Operating theatres - guidance for the prevention and control of surgical site infection Operating theatres - guidance for the management of infection control (part of the infection control manual). Formerly 3.03.
3.09 Organisational Policy for the Decontamination of Reusable Medical Devices This policy sets out the Trust's arrangements for ensuring that appropriate management arrangements are in place for decontamination procedures and applies to all Trust and non-Trust staff that may be required to decontaminate Medical Devices and to staff who are required to manage or maintain equipment used to decontaminate Medical Devices. Formerly 3.17.
3.10 Single-use medical devices: implications and consequences of use This MRHA publication draws attention to the hazards and risks associated with reprocessing and reusing single-use medical devices. It covers the legal issues and regulatory requirements of such actions. It also considers the implications of damage to the materials or construction of the device and inadequate decontamination procedures.
3.11 Decontamination of endoscopes Decontamination of endoscopes (part of the infection control manual). Formerly 2.08.
3.18 Guidelines for Pets as Therapy and assistance dogs in hospitals Guidelines for animals on hospital premises (part of the infection control manual). Formerly 3.04.

Section 4

Current Public Health England Guidance For current guidance from Public Health England

Section 5

Inoculation Injury Report Form This form is used to record an inoculation injury.
Occupational Health & Wellbeing Services (OH&WBS) Communicable Diseases Guidelines This guidance is intended for use by all staff employed within United Lincolnshire Hospitals NHS Trust to provide advice for the management of staff who develop an illness or infection that can be transmitted to other staff members, patients or visitors to the Trust. It is to be used in conjunction with advice from the Occupational Health and Wellbeing Service (OH&WBS), Infection Prevention and Control (IPCT), Human Resources departments and Health Protection Agency (NHS England), as required.
Safe handling and disposal of sharps, management of sharps injuries and exposure to body fluids This policy provides guidance on the management for the safe handling and disposal of sharps, management of sharps injuries and exposure to body fluids.

These sections comply with the requirements of the hygiene code.

Criterion 10: Ensure so far as reasonably practicable that care workers are free of and are protected from exposure to infections that caught at work and that all staff are suitably educated in the prevention and control of infection associated with the provision of health and social care

Seasonal Flu Vaccination

The Trust achieved a flu vaccination take up of 87% front line staff in ULHT for 2018/19. The Trust flu plan for 2019/20 is now in place and the vaccines are ordered for 2019/20. There is no CQUIN attached to this year's flu campaign the aim for the Trust is to improve on the previous year's uptake of 87% with a focus on Medical staff and Nursing staff who were lower than we would like

Immunisations and Vaccinations

The issues of non-compliance with staff not being immunised this results from staff failing to attend their appointments has improved and continues to improve. All staff who are non-compliant their line manager is made aware and they are followed up until compliant

Below is a breakdown of the vaccinations for ULHLT for 2018/19 the service ensures

that all staff are vaccinated and patients and staff are protected

United Lincolnshire Hospital Trust	
Year	**2018/19**
Course	**Total**
Hep B 1st (Standard)	53
Hep B 2nd (Standard)	45
Hep B 3rd (Standard)	51
Hep B 5 year Booster	48
Hep B Immediate Booster	142
Hep B 1st (Accelerated)	59
Hep B 2nd (Accelerated)	44
Hep B 1 year booster	1
Hep B 3rd (Accelerated)	35
Hep B Antibody Test	259
Hep BsAg	203
Hep B Antibody-HBc	36
Hep B Antibody Test (Accel/Immediate)	50
TB Check Site	323
TB Mantoux	3
TB Heaf test	2
TB - History of BCG vaccination	64
Varicella antibody test	105
Measles serology	204
Rubella serology	155
Mumps serology	205
Hep C Antibody test	229
Hep C Viral Load	10
HIV Antibody test	205
Combined Hep A & Hep B (Twinrix) - 3rd	36
Combined Hep A & Hep B (Twinrix) - 2nd	44
Combined Hep A & Hep B (Twinrix) - 1st	39
Varicella Primary Course 1	8
TB Quantiferon	54
Varicella Primary Course 2	9
Measles, Mumps & Rubella 2nd (MMR)	86
Measles, Mumps & Rubella 1st (MMR)	61
Grand Total	**2868**

Inoculation injuries

The main reason for inoculation injuries continues to be in insulin pen needles and incorrect disposal of sharps from individual records a number of incidents involve sharps boxes. Sharps boxes being used incorrectly are a high risk to staff sometimes we are unable to identify the source patient, such incidents can cost certainty as to the nature of the risk and cause an increased psychological and emotional trauma to the individual and member of staff involved.

The incidence of Inoculation injuries is reported at both the Infection Prevention and health and safety committees. Safer sharps are been introduced in the trust where possible, a more detailed report shows that since the implementation of safer sharps the number of injuries has increased. This is due to the publicity and raising awareness of inoculation injuries and increased reporting. There are clear changes in practice in two areas which have reduced the number of inoculation injuries as with safer sharps in some areas the number of injuries has declined.

The charts below give an indication of the number of inoculations injuries each year the increase in 2013/14 with the introduction of safer sharps and increased awareness. The second chart shows the change in practice in two areas and the sustained decrease in injuries

Year	Inoculation injuries
2012	112
2013	198
2014	208
2015	211
2016	183
2017	220
2018	192

Dept	Year			
	15	16	17	18
Maty	19	12	14	3
Theat	43	26	37	4
A&E	18	12	12	21
Wards	53	45	82	43
ITU	7	4	3	5

Hepatitis B Vaccine availability.
The position on 5 year boosters remains unclear the JCVI and Green book differ and we awaiting confirmation in the Green Book. The availability of vaccines is now not an issue

MMR look back exercise
This is ongoing and we continue to work through all the staff groups to look back at historical records to ensure all staff is compliant.

Section 6 Forward planning

The trust is expected to deliver and sustain continual improvements in quality and safety. The focus of sustained improvement will be achieving further reductions in health care associated infections and improving patient safety and quality.

In addition, there will be a working process of delivery towards more integrated Infection Prevention and Control practices across the trust and whole health economy as part of the sustainability and transformation partnership (STP) programme and developing an integrated care system (ICS) that maximises patient centred care delivery**.**

The trust must first work towards protecting and securing quality and safety for IP&C internally prior to initiating wider engagement working programmes. Therefore, a set of key milestones have been developed to demonstrate a sustainable programme of improvements in quality and safety which will achieved prior to work commencing on development of an ICS programme.

Key aspects of the sustainable planned improvements are as follows:

- Working with Antimicrobial Pharmacists and Microbiologists to support better management of antibiotic stewardship. This work will focus on reviewing the antibiotic formulary and training delivery to prescribers. The aim of this work is prevent both increased rates of *Clostridium difficile* infections, antibiotic resistance and reducing Gram negative bloodstream infections.
- Multiple themed audits in ALL clinical areas to be undertaken throughout the year. This will provide invaluable information as to the status of practice in the trust so that target actions can be put in place to improve.

- Development of the Link Practitioner programme will include the establishment of a ‘contract’ that allows the practitioner to have protected time for improvement work, education and support. In return, the trust will expect that each clinical area will send a nominated person to 3 out of the 4 quarterly meetings and should be able to demonstrate how they used their protected time to support their clinical area. This role will be reviewed every 2 years to ensure it remains effective and supportive.

- The IP&C team will work with the Harm Free Care group to develop better interoperability to ensure the reduction in duplication and greater effectiveness (the teams are greater than the sum of their parts).

The timescales for this planned programme of work is over a two year period in line with the trust 2021 strategy and will see ULHT in a position to consistently deliver high quality

and safe services and to take the lead in the development of an integrated Infection Prevention and Control service for the population it serves.

Other key pieces of work will include developing more efficient ways of working to allow for more operational 'clinical' time for the IP&C nursing team by looking at better use of technology to support the key functions of the IP&C team such as surveillance programmes and audit templates.

Section 7 Conclusion

This report has shown that the past 12 months has seen some significant improvements in IP&C for the trust and performance continues to improve with a 9% reduction in health care associated infections reported 2018/19. Early in 2017 the trust was rated as red by NHS Improvement with many key actions urgently needed to improve performance. With strong leadership and clear direction, the trust as a whole took decisive steps to improve quality and safety. This led eventually to the trust being rated as green twice by NHS Improvement and fully de-escalated from an IP&C perspective but despite this, ULHT continues to strive for ever better quality and safety.

The production of the comprehensive hygiene code gap analysis gave the trust a detailed list of both compliances and non-compliances that could be worked through in priority order. The comparison charts listed in the Criterion 1 section demonstrate the significant progress made towards compliance. In some areas the solutions are more long term and require investment however the monitoring through the trust IP&C committee will ensure that progress can be measured. The trust can now move on to higher aspirations for IP&C performance and an internal target of a further 5% reduction in health care associated infections has been set.

It was identified that not all areas were being audited for IP&C compliance. The themed audit programme visiting all clinical areas will help to inform the trust as to where targeted actions may be required and will form the basis for quality improvement monitoring which again can be managed through trust IP&C committee. The audit programme will also help to support the ward accreditation process currently being managed by the quality matrons.

The housekeeping provision over the past 12 months has presented challenges however with current move of housekeeping services returning to central facilities control now complete, a more manageable service can be delivered. This will help significantly with both winter pressures and the proposed deep clean programme.

Overall, the organisation can be pleased with the progress whilst understanding that there is still some way to go before comprehensive assurance can be offered for full IP&C compliance. The strong leadership and efficient use of resources within the IP&C service will undoubtedly mean progress momentum can be maintained and performance continuing to improve despite future pressures on the organisation.

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