

Trustwide Infection Prevention and Control Annual Report

April 2017 - March 2018



Foreword

I am delighted to introduce Nottinghamshire Healthcare NHS Foundation Trust's Annual Infection Prevention and Control Report for the period 2017 - 2018.

The report demonstrates that the Trust has continued to make significant progress towards achieving the key priorities introduced in last year's report and outlines our continued commitment to promoting best practice in Infection Prevention and Control, and reducing the number of healthcare associated infections.

As a diverse and complex organisation, our Infection Prevention and Control practitioners work together to provide strong leadership to not only ensure divisions comply with the requirements of the Health and Social Care Act (2010) but to also ensure we can demonstrate learning across the whole Trust through training, education and responding to incident reporting.

I am pleased to report that in the last year we have improved our NHSI Infection Prevention and Control surveillance rating of Rampton Hospital achieving a 'Green' status. That said, as recent CQC inspections indicate we still have compliance issues to address. Hence, we have reviewed our compliance tools and structures, and invested in increased dedicated leadership in the field. This is starting to pay dividends, bringing uniformity in standards, audit and compliance. This very much shapes our plans for the coming year.

As in previous years, the report follows the format of the Health and Social Care Act (2010) to demonstrate our progress with the requirements associated with the criteria of the Act.

Finally, the report outlines the priorities and future developments for 2018 - 19, and improving outcomes, assurance and compliance are key drivers for us.



Dr Julie Attfield
Executive Director of Nursing

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1. INTRODUCTION

Nottinghamshire Healthcare is committed to ensuring that effective prevention and control of healthcare associated infections (HCAIs) is embedded into everyday practice. The prevention and control of HCAIs is part of the Trusts overall risk management strategy.

The Trust Board recognises its collective responsibility for minimising the risks of infection and has agreed the general means by which it prevents and controls these risks and the responsibility for Infection Prevention and Control (IPC) is designated to the Director of Infection Prevention and Control (DIPC), supported by the IPC Team.

The IPC Annual Report (2017-18), together with the quarterly IPC report to the Trust Quality Committee, the Annual IPC Plan and the Assurance Framework are the means by which the Trust Board assures itself that prevention and control of infection risks is being managed effectively and that the Trust remains registered with the CQC without conditions.

In addition, the Annual Report (2017-18) seeks to assure the Trust Board that progress has been made against the Annual Plan. It demonstrates that priorities identified in the Annual Plan last year have been addressed by employing a robust programme of work that enabled some notable successes on which to build.

2. KEY ACHIEVEMENTS 2017-18

The following is a summary of the key achievements over the last twelve months:

- Zero MRSA bacteraemia
- Improving awareness of sepsis signs, symptoms and management continues to be a high priority for the Trust
- The team has completed a systematic review of all IPC policies that reflect the diversity of services within the Trust. All policies are currently up to date.
- Flu Programme successfully undertaken with 61% uptake
- IPC Team integration between Local Partnerships and Forensic and Offender Health has progressed over the last year, during the year staff changes include the introduction of the Lead Matron role with professional responsibility for Trustwide IPC services
- NHSI visits following CQC report in 2017 have seen a significant improvement against the action plan in most of the areas with bare below the elbows still being addressed in Forensic Services
- Surveillance of HCAI's across all areas of the Trust continue to be scrutinised in order that infections are able to be identified and treated appropriately at the earliest possible point.

3. COMPLIANCE WITH THE HEALTH AND SOCIAL CARE ACT 2010

Criterion 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

a. Organisational accountability for Infection Prevention and Control

Roles and responsibilities

IPC is the responsibility of everyone in the organisation. Key roles and arrangements are detailed below:

Chief Executive

The Chief Executive has overall responsibility for ensuring that there are effective management and monitoring arrangements provided for IPC to meet all statutory requirements.

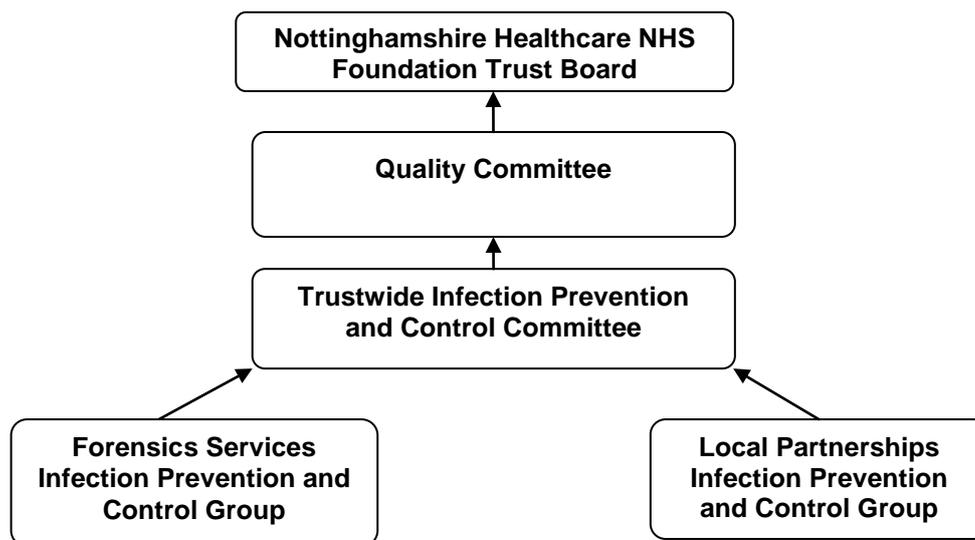
Director of Infection Prevention and Control

The Director of Infection Prevention and Control (DIPC) role is the responsibility of the Executive Director of Nursing. The DIPC is responsible for ensuring that systems and processes are in place in response to external and internal requirements to minimise risk to staff, service users and visitors and ensure compliance with the Code. The DIPC or a nominated deputy is the Chair of the Trustwide Infection Prevention and Control Committee.

Trustwide Infection Prevention and Control Committee

The Trust Infection Prevention and Control Committee is a mandatory requirement. It is a key forum for providing assurance that the Trust has in place structures and arrangements to meet all statutory requirements for IPC.

The chart below demonstrates the IPC reporting arrangements:



Infection Prevention and Control Service

The role and function of the IPC Service is to provide specialist knowledge, advice and education for staff, service users and visitors. All work undertaken by the service supports the Trust with the full implementation of and on-going compliance to the Code.

There is an IPC Team within each of the Divisions as identified below:

Division	Band	WTE	IPC Qualification
Local Partnerships	Band 8a	1.0	Managing an Infection Prevention and Control Service; Certificate in Education
	Band 7	0.6	Postgraduate Certificate in Infection Control; ENB N26
	Band 6	0.6	The Marion Reed IPC Course
	Band 6	0.9	Currently vacant
	Band 6	0.65	SNM3239 IPC for Health Practitioners
	Band 6	0.35	ENB 998 and ENB 2987
	Band 2	0.6	Healthcare Support Worker
Forensic Services	Band 8b	0.5	BA (Hons) Health Care Practice. ENB 998 Postgraduate Certificate in Infection Control + Non-Medical Prescriber
	Band 7	1.0	RN Adult and Child, ENB 99
	Band 6	1.0	Dip. In Tropical Medicine, ID Nursing Cert. Module of MSc in Hospital IC
	Band 6	0.7	

The infection prevention and control team has seen several changes including a retirement at Band 6, a move to clinical management at Band 8a and an increase in capacity in Forensic and Offender Health Services by 1.7 WTC at Band 6. Changes to the 8a post in Local Partnerships have seen the new post holder taking the professional lead Trustwide.

The Infection Prevention and Control team has links with the wider infection prevention and control network across all organisations in the County through local working arrangements and also through the Infection Prevention Society which enables team members to enhance their knowledge and awareness and promotes networking across the region.

Community Infection Prevention and Control Doctor/ Microbiology Consultant

Access to a Community Infection Control Doctor / Microbiology Consultant Service is essential for compliance with Criterion 1 of the Health and Social Care Act. This provision is in place. The Community Infection Control Doctor Service provides specialist expert advice and input to primary, community and mental health care providers.

Infection Prevention and Control Link Professional Network

The IPC Link Network continues to support the function of the IPC team and is an important and effective means of disseminating information and good practice guidance. Link members act as visible role models and local IPC leaders and advocate high standards of IPC. They provide a link between their colleagues and the IPC team in order to facilitate good practice and improve standards within their team. In Forensic / Offender Health there are currently around 45 link professionals while in Local Partnerships there are 72 link professional staff.

b. Monitoring the prevention and control of infection

Surveillance of healthcare associated infections

Mandatory surveillance systems are in place to monitor alert organisms such as Meticillin Resistant *Staphylococcus aureus* (MRSA), *Clostridium difficile* infection (CDI), Carbapenemase Producing Enterobacteriaceae (CPE) and *Escherichia coli* (E.coli). Nottinghamshire Healthcare is not allocated separate trajectories for alert organisms. Our surveillance data (as detailed in Table 1) is reported as part of the Primary Care Organisations for Nottinghamshire County, City and Bassetlaw.

	Mental health services	Forensic Services	General health services	Total
MRSA bacteraemia	0 (0)	0 (0)	0 (0)	0 (0)
<i>Clostridium difficile</i> Infection	1 (0)	0 (0)	5 (1)	6 (1)
<i>Clostridium difficile</i> deaths	0 (0)	0 (0)	0 (0)	0 (0)
Tuberculosis	0 (0)	0 (0)	0 (1)	0 (1)
Carbapenemase Producing Enterobacteriaceae	0 (0)	0 (0)	0 (0)	0 (0)
<i>Escherichia coli</i>	0 (0)	0 (0)	0 (0)	0 (0)
Outbreaks of infection (D&V and ILI)	3 (1)	2 (2)	6(1)	9 (4)

Table 1 - Nottinghamshire Healthcare NHS Foundation Trust HCAI Data (2017-18). Last years' figures in brackets.

The surveillance data demonstrates that the zero tolerance approach of avoidable HCAs along with the proactive work undertaken by the IPC Service is having an impact on the number of incidences reported. There have been no cases of MRSA bacteraemia attributed to Nottinghamshire Healthcare however there has been an increase in *Clostridium difficile* Toxin Infections, which although concerning is in line with national increases. None of the cases were linked and all were associated with an increased use of antibiotics administered for treating other underlying infections.

Root cause analysis (RCA)

When reportable HCAs occur, the process of RCA or Post Infection Review (PIR) is undertaken for MRSA bacteraemia, *Clostridium difficile* death (reported as 1a on a death certificate), cases of *Clostridium difficile* infection and outbreaks of infection. This is to identify a root cause where possible and actions to prevent it reoccurring. The main issues and lessons learned identified are identified in Table 2.

RCA type	Contributory factors	Lessons learned / service improvements
MRSAb (PIR)	N/A	
<i>Clostridium difficile</i> infection (RCA)	Antibiotic use	Raised awareness of causes of diarrhoea
Outbreaks (RCA) Influenza A & B	Increased cases nationally	Prompt isolation measures required Prompt reporting of outbreaks Essential
Group A <i>Streptococcus cluster</i>	GAS sporadically circulating in prison and homeless populations Closed environment with specific problems associated with detained persons	Delay in identification of GAS from surveillance lists Poor communication from medical staff to healthcare staff within prison healthcare
Diarrhoea and vomiting	Untimely collection of stool samples Inaccurate documentation	Better documentation required and communication with other care providers

Table 2 - Main issues and lessons learned during RCA process (2017-18)

MRSA admission screening

In accordance with the Health and Social Care Act 2010, Nottinghamshire Healthcare continues to have management systems in place to ensure that MRSA is promptly identified. This includes the risk from patients who have repeated admissions to healthcare, move between healthcare settings and are at particular risk of acquiring an MRSA infection.

General health services have reported 4 positive MRSA colonisation samples for 2017-18 and Mental health services have reported a total of 5 positive MRSA colonisation samples for 2017-18.

Forensic Services, there have been 4 cases of MRSA colonisation, screening continues as per policy.

Division	Number of screens taken	Number of positive samples
Local Partnerships (GH and MH)	1782 (1258)	9 (MH - 5 and GH – 4) (4)
Forensic Services	Unknown total	4
Total	1782	13

Table 3 - number of admission screens taken across the Divisions and the number of positive samples from (2017-2018). Last years' figures in brackets.

c. Sharps Incident reporting

The IPC Service continues to monitor and scrutinise all reported sharps related incidents, There was an overall reduction in 2017-18, this is a 37% reduction from 2016-17 (Table 3).

	Total number of sharp related incidents (16/17 comparison)	Total number of sharp related incidents 17/18
Quarter 1	12	9
Quarter 2	10	17
Quarter 3	23	5
Quarter 4	9	3
Total	54	34

Table 4 - Trustwide sharps incidents (2017-18)

Themes from sharps related incidents

The following themes have been identified,

- these are inappropriate disposal of needles,
- use of insulin needles and
- inappropriate disposal of sharps by patients.

Sharps safety engineered device use is now well embedded throughout the Trust and this continues to be audited by the Infection Prevention and Control team across the organisation.

The IPC Service are working with staff and partner organisations to address risks identified and to ensure that Nottinghamshire Healthcare is compliant with the requirements of the Health and Safety Executive's Sharp Instruments in Healthcare Regulations 2013.

The following initiatives have been introduced to further support the reduction of avoidable injuries,

- all sharps incidents are reported via Ulysses
- all incidents are followed up by the IPC team using the RCA tool or equivalent questionnaire to identify risks and actions for learning.

An e-learning package is now in place which is completed by any member of staff who sustains a needle stick injury, with prompts to undertake this on the Ulysses system and the IPC team follow up each staff member to ensure this has occurred before the IR1 is signed off. The training is accessible to all staff and a training video is also available.

The IPC team support healthcare staff through training to promote best practice in order to reduce sharps injuries.

d. IPC Audit Programme

The review of clinical practices and the overall environment through audit is an established means of monitoring and improving the quality of care and of supporting the implementation of change in practice. Under the terms of the Health and Social Care Act, Nottinghamshire Healthcare has a duty to provide a programme of audit to ensure that key policies and practices are being implemented and sustained appropriately.

IPC audit tools used across the Trust have been reviewed in 2017/18 in order to provide a comprehensive tool that can be used in all inpatient areas, use of the new tool will commence for 2018/19.

The IPC audit programme is led and managed through the Trust wide IPC Committee. The IPC teams promote clinical audit as a crucial part of clinical governance. All healthcare professionals and link professionals are expected to be involved in the audit process to assist in enhancing the quality of patient care, service and environmental improvements.

The following are some of the main themes identified as part of the audit process:

- Environmental cleaning standards
- Staff not adhering to the Bare Below the Elbows Policy
- Poor management of sharps disposal systems
- Gloves not worn to undertaken phlebotomy

To provide assurance for areas of non-compliance identified at audit a completed quality improvement plan is required. These are scrutinised until all actions are fully completed, monitoring by the IPC teams via the local IPC groups and Trust Wide IPC Committee.

Each audit score whether demonstrating a high or lower compliance resulted in a quality improvement plan to give assurances that compliance is achieved over a defined period of time.

Low compliance has also been associated with environmental issues and therefore facilities and estates are included to inform and address issues within their sphere of influence.

Clinical non-compliance is addressed by ward managers and link practitioners working closely with the IPC and ward teams.

The revised in-patient IPC audit tool which has been introduced ready for 2018/19 will address the variances in scoring and enable comparison between in-patient areas, with defined targets to achieve.

IPC In-Patient areas - audit scores 2017 – 18

Forensic and Offender Health - scores shown in 00/00/000 format in Forensic/Offender Health equate to Red/Amber/Green compliance. The first two figures **00**/00/000 are the red score or non-compliant, the second two figures are the amber or partially compliant score and the third three figure are the green or compliant score.

Arnold Lodge								Wells Road					
Coniston	Tamar	Rutland	Cannock	Foxton	Thornton	Ridgeway	Primary Care	Seacole	Thurland	Porchester	Trent	Lister	
1/55/151	1/54/152	2/14/168	3/23/173	24/22/158	24/12/168	2/14/166	2/11/104	2/12/162	2/13/161	2/12/162	2/16/158	2/11/163	
Rampton Hospital													
Adwick	Aintree	Alford	Blake	Bonnard	Brecon	Burne	Cambridge	Canterbury	Cheltenham	Cheviot	Cotswold	Eden	
71%	2/3/196	0/5/196	72%	0/4/197	74%	0/4/197	0/3/198	1/4/196	97%	0/4/197	1/7/193	1/3/197	
Emerald	Erskine	Evans	Grampian	Hambleton	Jade	Kempton	Malvern	Newmarket	Quantock	Ruby	Topaz		
70%	1/5/194	0/1/200	0/4/197	1/5/195	77%	97%	1/5/195	97%	1/5/195	70%	76%		
Wathwood													
Wathwood Assessment	Wathwood Rehab	Wathwood Continuing Care	Wathwood The Lodges										
0/3/204	0/1/206	0/1/205	0/2/205										
Offender Health													
HMP Doncaster	HMP Lincoln	HMP Lindholme	HMP Lowdham Grange	HMP Moorlands	HMP North Sea Camp	HMP Nottingham	HMP Ranby	HMP Whatton	HMP Morton Hall				
2/9/170	3/4/153	3/11/156	14/5/153	4/12/154	0/1/178	0/3/175	12/9/114	0/6/200	94%				
General Health													
Bassetlaw Hospice	John Eastwood Hospice	Castle Ward LBH	Forest ward LBH	John Proctor Ward LBH									
99%	97.60%	86%	91%	90%									
Mental Health													
Bassetlaw Hospital		Millbrook, Sherwood Forest Hospital				Highbury Hospital							
Bassetlaw B1	Bassetlaw B2	Amber ward	Kingsley Ward	Lucy Wade Wd	Orchid Ward	Silver Birch	Cherry	Rowan 1	Redwood 1	Redwood 2	Rowan 2	136 Cassidy Suite	
94%	87%	92%	88%	91% (PICU 95%)	88%	95%	91%	85%	84%	77%	84%	81%	
Highbury Hospital													
Willows	Woodlands	Orion Unit	Alexander House	Horizon Unit	Jasmine Suite	Hazelwood House	Bracken House						
73%	89%	85%	96%	98%	82%	67%	93%						
Other MH & IDD Premises													
Thornywood Mount	Thornywood Adolescent Unit	Mother and Baby - A45 QMC	Holly Lodge Newark	Parkside Day Hosp	Harper Villa	Heather Close	Marlow House	Millfields	Musters Road				
94%	90%	46%	92%	74%	41%	85%	57%	86%	55%				

Table 5 - Trustwide Audit Programme Results (2017-18)

Criterion 2: Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections.

a. Cleanliness

Nottinghamshire Healthcare has systems in place to ensure that all managed healthcare premises are suitable and fit for purpose. The environments are monitored to ensure they are clean, maintained and in good physical repair and condition. Environmental, clinical equipment and cleaning audits are carried out by IPC and Hotel Services, which include the '49 elements', inspections, these all monitor standards of cleanliness and that environmental policies and procedures are adhered to.

The Trust participates in the annual Patient-Led Assessments of the Care Environment (PLACE) programme where patient representatives together with key staff members assess the Trusts compliance against a range of different patient environment focused standards. PLACE scores are reported publically and improvements are made to the patient environment as a result. The areas that are monitored include cleanliness; food and hydration; privacy and dignity; wellbeing and condition, appearance and maintenance of healthcare premises and a dementia domain which measures whether the premises are equipped to meet the needs of dementia sufferers against a specified range of criteria. Adequate provision of suitable hand washing facilities across the Trust is also monitored.

PLACE assessments were conducted across Nottinghamshire Healthcare between March and June 2017 and the collective results were as follows, arrows indicate an increase or decrease in the score compared to 2016/17:

Year 2017	Org Code	Organisation Name	Commissioning Region	Cleanliness	Organisation Food	Ward Food	Privacy, Dignity and Wellbeing	Condition Appearance and Maintenance	Dementia	Disability
	National Average 2017	Nottinghamshire Healthcare	Trent	98.4%	88.8%	90.2%	83.7%	94%	76.2%	84.06%
	RHA	NOTTINGHAMSHIRE HEALTHCARE NHS FOUNDATION TRUST	MIDLANDS AND EAST OF ENGLAND	96.1% ↓	87.2% ↑	85.86% ↓	89.83% ↓	94.22% ↓	81.99% ↓	88.47% ↑

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

The criterion requires that systems are in place to manage and monitor the use of antimicrobials to ensure that inappropriate and harmful use is minimised and patients with severe infections such as sepsis are treated promptly with the correct antibiotic.

A review of antimicrobial stewardship was carried out in the Forensic services.

The main findings were that across Forensic services (Rampton Hospital, Wathwood, Arnold Lodge, Wells Road Centre), 29 wards had at least one active antimicrobial treatment at the time of the audit, this constituted 51 prescriptions. 26 of which were for oral treatment mostly for acne.

The Area Pharmacists, have registered and set up an audit of antimicrobial use within Offender Health which will be undertaken in 2018/9, a service evaluation was also undertaken.

Antimicrobial review meetings continue to take place quarterly with the Consultant Medical Microbiologist and key members of the Trust Pharmacy team, the purpose of which is to provide scrutiny of antimicrobial prescribing across all areas of the organisation. The updated Nottinghamshire Area Prescribing Committee antimicrobial guidelines have been circulated to prescribers Updating ward stock lists to ensure only first line medicines are available ensuring restricted access to other antimicrobials so they are available for use when recommended but use is monitored by pharmacy. The Connect page which includes links to guidance that covers different areas of the Trust has been updated, and refreshed.

Several Patient Group Directions (PGDs) have been developed and approved by the Trust Medicines Optimisation Group (TMOG) or the Notts PGD Group. The annual PGD to support the Trust Staff Flu Vaccination Campaign was approved and for the first time a pharmacist was trained to administer the flu vaccine to staff. The appropriateness of use of PGDs for antimicrobials was considered by the Notts Antimicrobial Stewardship Group, in order to inform the processes of the Notts PGD Group. A secret shopper service evaluation of the use of the Staff Flu Vaccination PGD was delegated to a pharmacist as an objective to ensure that the PGD and protocols were being adhered to.

Training sessions on antimicrobials have been delivered to nurses by a Senior Clinical Pharmacist. A review of antimicrobial prescribing for the period Oct 2016 – March 2017 took place to check retrospectively quantities issued from pharmacy, recognise trends and agree further actions which was overseen by the Consultant Medical Microbiologist. A re-audit of antimicrobial use occurred at Lings Bar Hospital April – May 2017.

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

Service user engagement

A variety of methods are used to communicate the IPC message to service users, staff and other providers. The IPC team are able to signpost enquirers to validated websites via Trust communication publications to ensure that the most relevant information is used for giving information.

The IPC annual report and other relevant documents are available on the Trust website.

IPC notice boards are prominent in service user/patient facing areas and updated regularly to promote key messages using the link practitioners. Carer days and service user forums have included IPC information giving sessions. Service users continue to be included in all PLACE audits to provide a patient perspective on our services including IPC and the environment.

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 IPC team liaise with the Infection Control doctors / Consultant Microbiologists and Public Health England to ensure service users / patients receive the appropriate treatment using microbiological diagnostics. Results from three laboratories across the county are reviewed daily to ensure prompt identification and treatment of infections. Several other microbiological laboratories are used for out of county Offender Health.

The IPC team support clinicians in ensuring that appropriate care is delivered and IPC policies and procedures are complied with. This is monitored as part of the extensive IPC audit programme.

a. Catheter associated urinary tract infections (CAUTIs)

Mental health services have conducted monthly surveillance to identify patients with indwelling urinary catheters. From the period April 2017 – March 2018 there have been 17 patients with indwelling urinary catheters which have been followed up by the IPC team. The patients are reviewed on a weekly basis to ensure that catheters are removed as soon as possible, if appropriate to minimise risk of infection. Recent themes have included lack of fully completed catheter documentation and this has been fed back to service managers and shared with clinical teams.

Forensic services have a reporting tool for catheters and chronic wounds. The Catheter Passport, a patient held document which details current and previous urinary catheter use are in use in Local Partnerships and will be rolled out to Forensic Services in 2018/19 however this continues to involve only small numbers.

General health services have continued to undertake catheter observation audits quarterly. Action plans are generated for any issues identified and learning is shared via the Local Partnerships IPC Group and Link Network. No specific themes have been identified.

b. Sepsis awareness

Staff awareness of sepsis remains a high priority for both the IPC and Life support teams in line with national guidance. Sepsis is a life threatening condition that arises when the body's response to an infection injures its own tissues and organs. Sepsis can lead to shock, multiple organ failure and death especially if not recognised and treated promptly. Sepsis kills 44,000 people per year in the UK.

Many of these deaths could be avoided if a diagnosis of sepsis was identified early enough to intervene and treat.



The Trust wide action plan for sepsis continues to be reviewed and monitored.

- A sepsis e-learning module is available via Connect.
- Face to face sepsis awareness training sessions have been and continue to be delivered extensively across the Trust at induction, mandatory and as an ad-hoc training.
- A Trust wide Sepsis Recognition policy has been developed to reflect the requirements of the sepsis NICE guidance, this includes algorithms for patient care in all settings.
- A Trust wide sepsis awareness campaign was systematically delivered in 2017
- Care pathways on all types of infections are completed with ward teams in all divisions.

Criterion 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

Training and development (also included in Criterion 10)

IPC training is an integral part of Trust induction and mandatory clinical essential training. The training content covers all of the standard IPC principles as directed by the standards for inclusion in training for IPC. Training is also delivered in response to root cause analysis investigations and audit outcomes. The Trust training compliance for IPC for 2017/18 was 94%. The IPC team support the frontline staff in delivering a proactive service which includes taking training to the wards and departments as needed. IPC training has been delivered divisionally and the requirement for IPC training over a three year period now consists of face to face training

once in every three year period, with the e-learning option fulfilling the annual requirement for the other two years.

The Trust IPC team work with the Learning and Development team to provide both induction and mandatory IPC training including hand hygiene for Trust staff. In addition hand hygiene and sharps safety are currently available as e-learning packages. Hand hygiene training is refreshed at ward level by IPC Link staff delivering short training packages.

Link Professionals through the Link Network are established in all settings, plans for 2018/19 include merging mental health and local partnerships groups into one cohesive link professional group. Professional development of IPC team members is included in the IPC strategy. The team has access to educational links via the Infection Prevention Society.

Criterion 7: Provide or secure adequate isolation facilities

Nottinghamshire Healthcare continues to provide adequate isolation precautions and facilities. Observations of outbreak management have demonstrated that the policy is being adhered to, prompt reporting of potential outbreak situations enables frontline staff to utilise IPC advice at the earliest opportunity thus minimising the risk of extensive or prolonged outbreaks. Isolation facilities are audited in the annual audit programme of inpatient facilities. Forensic services provide single room accommodation that facilitates isolation when the need arises.

The IPC team undertook a snapshot audit of isolation facilities and practices across the divisions in 2017 / 18. Findings included inadequate equipment, poor knowledge of isolation requirements and use of Personal Protective Equipment. These findings prompted the IPC team to provide additional support and education to staff.

Criterion 8: Secure adequate access to laboratory support as appropriate

Laboratory support is provided by colleagues at the acute Trusts. The IPC Service routinely liaises with the laboratories to discuss the microbiological sample results. A policy on obtaining samples has been written and ratified. The aim of the policy is to ensure that staff obtain samples appropriately and act on the outcomes accordingly. Forensic Services will be expanding laboratory support in 2018/19

The Trust contracts a service for sample transportation with Nottingham Blood Bikers, a voluntary service that supports the NHS. IPC training has been delivered to members of the team.

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

Nottinghamshire Healthcare recognises the importance of providing staff with easy access to a full range of IPC policies, procedures and guidelines. Throughout 2017-18 the IPC Team continued to review and revise these documents to take account of the latest IPC best practices.

These are reviewed and monitored collaboratively by the divisional teams to ensure consistency, and that they are fit for purpose across all areas of the Trust. Consideration of new national guidance such as National Institute for Clinical Excellence (NICE) Quality Standards, Department of Health directives and developments in practice for IPC are included. The IPC policy development process is monitored through the Trust Infection Prevention and Control Committee ratification process.

Criterion 10: Providers have a system in place to manage the Occupational Health needs and obligations of staff in relation to infection

During the course of their work, Trust employees come into contact with a number of infectious agents which may theoretically be passed from patients/service users. Examples of these infections include; Hepatitis B, Hepatitis C & HIV, TB, Measles, Mumps, Rubella and Varicella.

New employees are asked to attend an appointment with the Trust's occupational health provider (Nottingham University Hospital NHS Trust) for an immunity check. The immunity check is an assessment that identifies any risk from exposure to an infectious agent associated with the employee's role and a vaccination programme is commenced.

The occupational health service delivers advice and ongoing support to Trust employees and managers on specific additional measures that might be required following an incident where exposure to an infected individual, pathogen or contaminated instrument occurs. This includes advice and the provision of post exposure prophylaxis following occupational exposure to HIV. A schedule of ongoing vaccinations and blood tests is delivered in accordance with DH guidance.

The Seasonal Influenza programme for the Trust in 2017/18 was supported by Occupational Health and Physical Healthcare teams. Initiatives such as increased availability of clinics, taking clinics to induction days and mandatory trainings, identifying meetings where staff groups could all be targeted, additional peer vaccinators and a range of other initiatives saw the total uptake increase from 44% to 61%.

4. PRIORITIES AND FUTURE DEVELOPMENTS (2018-19)

The priorities below represent a continuation of the priorities identified during 2017-18 leading to an integrated infection and prevention approach across the organisation.

Priority	Actions
1. Response to CQC and NHSI visits during 2017 / 18	<ul style="list-style-type: none"> The IPC team will continue to monitor measures put in place to address the concerns highlighted in 2017 / 18. Trustwide IPC nurse lead to provide IPC professional leadership across all divisions. Promotion of integrated IPC team working across the Trust including standardisation of audit tools / training packages / methodology of IPC working to ensure a cohesive and responsive service across all areas of the organisation. The IPC Link professional forum, audit programme, annual plan. Collaborative and cross division working
2. Proactive responses to Internal Audit and PLACE findings	<ul style="list-style-type: none"> The Trustwide Infection Prevention and Control Committee to ensure oversight and scrutiny of actions identified. Proactive inclusion of IPC team in PLACE audits as standard.
3. Antimicrobial resistance (AMR)	<ul style="list-style-type: none"> To work collaboratively with pharmacy, medical colleagues and NMP staff to achieve medicine optimisation in relation to AMR Area pharmacists will audit antimicrobials in Offender Health in 2018- 2019
4. To continue to maintain the high profile of sepsis awareness.	<ul style="list-style-type: none"> Maintain the raised awareness and prioritise sepsis, it's causes and signs across the Trust to all healthcare staff. Continue campaigns to promote better knowledge and understanding in all areas
5. To embed safer sharps practice and eliminate avoidable sharps incidents	<ul style="list-style-type: none"> Continue to promote and implement the use of safety engineered devices. Close monitoring via the Divisional IPC Groups and Trust wide IPC Committee Provide scrutiny for each sharps incident, support managers and individual staff and promote raised awareness by use of the e-learning package.
6. To support the Trust ambition to increase the uptake of the flu vaccine within all staff groups	<ul style="list-style-type: none"> IPC to take a proactive part in Seasonal Influenza planning and delivery of both Peer Vaccination training and delivery of Influenza vaccination clinics across the organisation. Learn from the past year and external campaigns nationally to influence the uptake.
7. Catheter Associated Urinary Tract Infections (CAUTI's) / UTIs	<ul style="list-style-type: none"> Catheter practices will continue to be monitored – increased reporting of audits across all areas to be actively targeted. Catheter passports to be used across the whole organisation There will be a focus on education with regards to appropriate treatment and antimicrobial prescribing for Catheter Associated Urinary Tract Infections (CAUTI's) / UTIs
8. E.coli bacteraemia monitoring and prevention	<ul style="list-style-type: none"> Work collaboratively with PHE and the Notts wide whole health economy group to identify E.Coli bacteraemias
9. To standardise the Trust wide IPC audit tool for in-patients	<ul style="list-style-type: none"> Use of a Trust wide set of IPC audit tools together with supporting high impact interventions as part of the suite of assurances. Facilitate the IPC audit tool transfer to Odyssey platform to enable a comprehensive and robust reporting system.
10. To standardise Trust wide audit tools for clinics and outpatient areas	<ul style="list-style-type: none"> Using the model for in-patient area IPC tool, standardise the audit tool for all clinic settings and outpatient areas.
11. To standardise IPC training for all settings	<ul style="list-style-type: none"> To work to ensure that Level 1 and Level 2 IPC training is consistently delivered across all settings.

5. SUMMARY

The Trust has made changes in the way that IPC is delivered over the past year to meet the needs of the organisation and to be able to withstand external scrutiny, this is a dynamic process and change will continue as IPC continues to evolve.

The Trust has a renewed commitment to implement best practice using a broad evidence base and this will be achieved through the leadership of a proactive and dedicated IPC team. Changes made so far have brought about a more cohesive approach for all IPC activity and this new approach will continue and develop into a much more robust service for the benefit of all service users.

The main focus for 2018/19 will be preventing and reducing the incidence and risks associated with HCAs. The organisation recognises that building on past achievements, sharing best practice, developing and implementing improved IPC strategies, collaboratively working with colleagues across the wider healthcare community will result in improved outcomes and experience for patients, service users and carers. Delivering clean, safe care continues to be the mainstay of the Trust ambition to have no avoidable infections.

In 2018-19, Nottinghamshire Healthcare staff will continue to work to embed a robust governance approach to IPC across the whole organisation. The IPC team and all healthcare staff will continue to take up the challenge with renewed vigor aiming to prevent all healthcare associated infections.

6. REFERENCES

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