Sheffield Health and Social Care NHS Foundation Trust

Infection Prevention & Control Annual Performance Report 2019 – 2020

Infection Prevention & Control Programme 2020 - 2021

Proud to care in Sheffield

Contents

1. Introduction

1.1 Infection prevention and control (IPC) is a practical, evidence-based approach which prevents service users and health workers from being harmed by avoidable infections. Preventing health care-associated infections (HCAI) avoids unnecessary harm and at times even death, saves money, reduces the spread of antimicrobial resistance (AMR) and supports high quality, integrated, people-centred health services.

1.2 The Annual Report of the Infection Prevention and Control Team provides a retrospective overview of the activities carried out to progress the prevention, control and management of infection within Sheffield Health and Social Care NHS Foundation Trust (SHSC) during the last year (April 2019 – March 2020).

1.3 The Infection Prevention and Control Team provide a service to all the Clinical and Corporate Services within SHSC and aims to optimise individuals' care; whilst protecting Service users, staff and others from the risk of cross contamination and outbreaks of infection.

1.4 The Infection Prevention and Control Team strive to promote and embed current evidenced-based best practice guidance regarding the prevention of infection and control when necessary in accordance with:-

- The Health & Social Care Act 2008 (2015): Code of Practice on the Prevention and Control of Infections and related Guidance. (Hereafter referred to as the 'Health Act 2008').
- Board Assurance Framework
- NHS Litigation Authority Standards for Mental Health and Learning Disabilities
- CQC Fundamental Standards

1.5 The core aim of the Infection Prevention and Control Team is to support the organisation at all levels, to both deliver clean safe care and provide assurance that the Trust is complying with standards set out in the Health Act 2008 and the Care Quality Commissions' Fundamental Standards.

2. Governance Arrangements

It is noted within the Health Act (2008) that the Board of Directors has a duty to have in place *"Appropriate Management Systems for Infection Prevention and Control".*

The NHSLA Risk Management Standards for Mental Health and Learning Disability Trusts specifies that the Trust must *"Have a Process for Managing the Risks associated with Infection Prevention and Control. Infection Prevention and Control should be an integral part of Clinical and Corporate Governance".*

The overall monitoring of the Infection Control programme is via:-

- Trust Boards Monthly Quality and Safety Dashboard
- Quarterly Infection Prevention & Control Committee.
- Quarterly and Annual Report to the Quality Assurance Committee
- Quarterly performance reporting to the Clinical Care Networks Governance Meeting.
- Quarterly performance reporting to the Infection Control Committee

2.1 The Role of the Infection Prevention and Control Team (IPCT)

2.1.1 The role of the Infection Prevention and Control Team (IPCT) is to provide expert advice to minimise the risk of infection. Its primary functions are to:

- Minimise the risk of infection to Service Users, staff and visitors.
- Provide and update infection prevention and control policies.
- Provide an infection control annual report, which incorporates the infection control programme.
- Develop audit tools and facilitate the audit programme.
- Lead on the educational content of the Trust's infection control curriculum.
- Provide expert advice regarding infection control in the built environment and support the appropriate purchase and decontamination of medical devices; supporting the Trust's Medical Device Liaison Officer and Decontamination Lead.
- Provide expert advice regarding hygiene standards and cleaning frequencies, cleaning materials and equipment, and input on contracts/specifications for healthcare waste and laundry.
- Advise the Trust regarding government guidance and legislation (in relation to infection prevention and control) and measure compliance and provide a Trust action plan when required.
- Work with Public Health England and the Sheffield Clinical Commissioning Group regarding surveillance and notification of infections.
- Provide advice to all areas of the Trust and to all people who are involved in providing services or in receipt of our care. The advice given is varied, ranging from estate issues to the management and control of infections.
- Play an active role on a number of Trust-wide groups including the Water Safety and Nurse Leadership.
- Provide advice to Estates and Clinical Care Networks regarding refurbishments, new builds and issues around water quality, healthcare waste and linen management.
- Have close contact with Procurement and provide advice on any infection control related issue pertaining to equipment and devices to be purchased by the Trust by supporting the Medical Devices Liaison Officer.
- Together with Health and Safety Officer and Clinicians, address the Trust's requirement to comply with the European Directive (Council Directive 2010/32/EU) to prevent inoculation injuries and infections to Health Care Workers from Contaminated sharps.

2.1.2 The IPCT have worked creatively and currently the team consist of one WTE Lead clinical nurse specialist, one WTE non-clinical assistant co-ordinator and via a Service Level Agreement with Sheffield Teaching Hospitals, Consultant Microbiology / Infection Control Medical input from Professor Rob Townsend.

2.2 Infection Control Committee (ICC)

2.2.1 The committee meets quarterly chaired by the Lead Nurse. The role of the Infection Control Committee is to endorse the infection control programme, monitor and oversee its implementation and progress during the year and initiate changes as required to ensure compliance with the Health Act 2008, NHSLA and the CQC Fundamental Standards. The Terms of Reference for this group remain current for this reporting period.

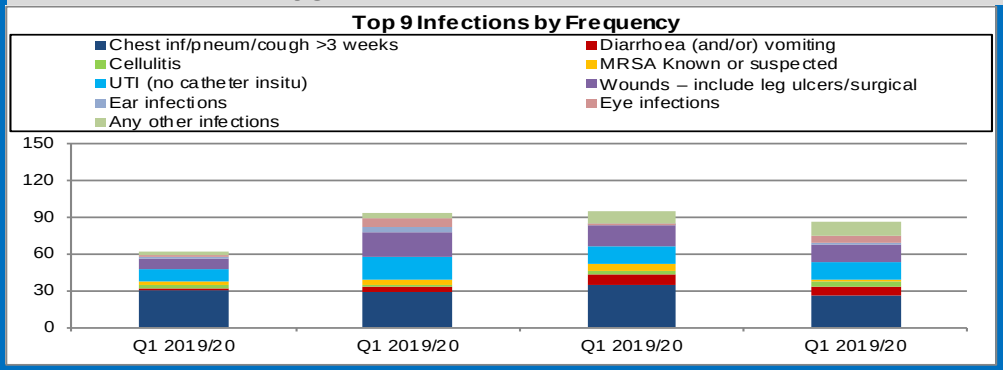
A review of committee membership and attendance has been progressed during this reporting period, due to audit findings from the Internal Audit undertaken by 360° Assurance.

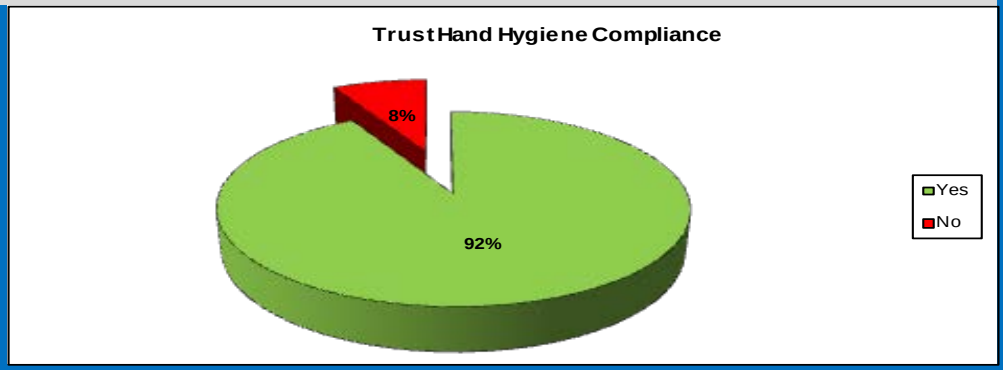
2.2.2 Key objectives:

- To oversee compliance with national standards/targets in relation to IPC and HCAI.
- Provide advice to the Infection Prevention and Control Team, the Director for Infection Prevention and Control and the Board of Directors, to ensure appropriate actions are taken.
- Monitor and report exceptions, adverse incidents and receive updates as necessary
- To oversee all infection prevention issues and adverse incidents.
- Policy development and review
- Audit and monitoring of action plans produced by individual areas/services
- Education and training
- Review RCA and PIR reports, identify and disseminate lessons learnt and monitor any action plans developed following investigations
- To inform the Quality Assurance Committee of progress and exceptions for onward reporting
- To monitor compliance for IPC training.

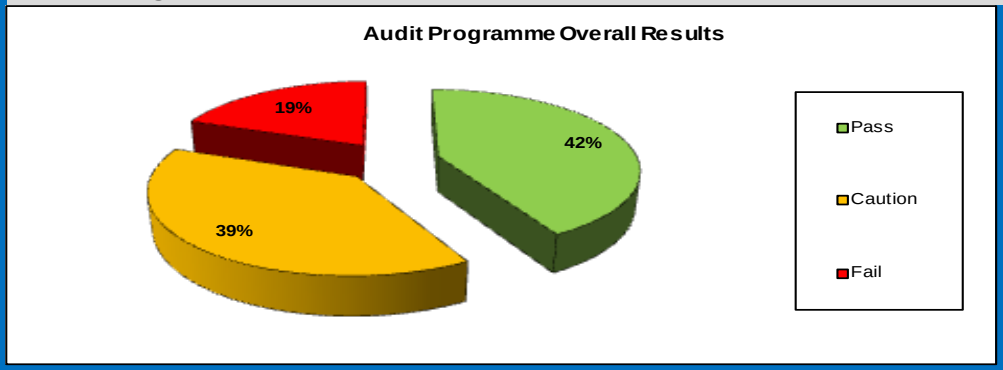
Infection Control Dashboard: April 2019 - March 2020

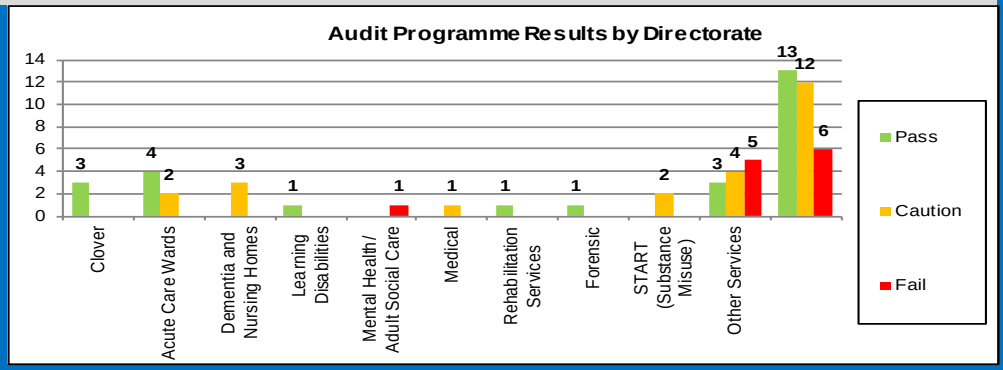
Infections / Hand Hygiene



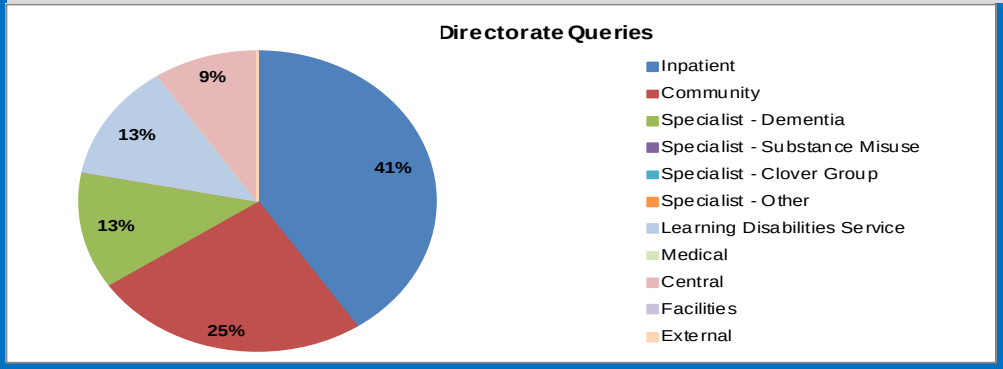


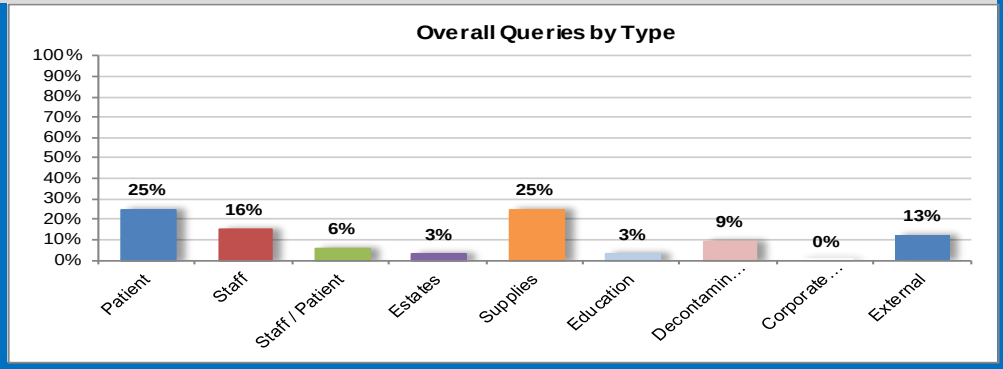
Audit Programme





Queries





3. Performance Summary - Annual Infection Control Programme for 2019 – 2020: See Dashboard page 4

3.1 Hand Hygiene

3.1.1 It is well evidenced that hand hygiene is the simplest and least expensive intervention that can actively reduce the risks of cross contamination between staff, Service Users and visitors. Body secretions, surfaces of inanimate objects and hands of all human beings can carry bacteria, viruses and fungi that are potentially dangerous to them and others. Therefore, the promotion of effective hand hygiene coupled with "Bare Below the Elbow" (BBTE) within the Trust continues to be high on the agenda. Additionally, this year we have completed a follow-up audit in the 3 areas were uniforms are currently worn. Further details of this audit can be found in section 3.7.

3.1.2 The Trust is required to have effective systems in place to prevent irreducible infections; this includes the provision of appropriate well-maintained facilities, ample supplies of quality consumables (liquid soap, paper towels, alcohol handrubs and moisturiser); the display of promotional materials and relevant training in hand hygiene techniques and skin care.

3.1.3 To this end the Infection Prevention and Control Team continually work with Procurement and Estates to ensure that products are consistently available. NHS Supply Chain is currently undergoing considerable reorganisation at present. In addition, the audit of hand hygiene facilities has been performed by the IPCT and where facilities were identified as insufficient, these issues are being addressed by Estates.

3.2 Education and Training

3.2.1 The Health Act 2008 requires that all staff require appropriate on-going education which should incorporate the principles and practice of prevention and control of infection. Clinical staff should have an on-going understanding of the risk from existing, new and emerging infectious diseases and take this into account when assessing Service Users.

3.2.2 The Trust's education and training needs matrix contains the infection prevention and control requirements for all staff groups/disciplines. Managers continue to be provided with information on who is compliant with the minimal level of hand hygiene and infection prevention education on a quarterly basis via colleagues in the Training Department.

3.2.3 The minimum standards are for all new staff to receive training on corporate induction (known as Core Mandatory); which covers the basic principles of Standard Infection Control Precautions (SICP). SICP training includes appropriate hand hygiene with soap & water and alcohol handrubs, the use of Personal Protective Equipment (PPE), decontamination of equipment, sharps safety, healthcare waste management, laundry management, spillage management and isolation precautions. All staff with direct care contact receives an IPC refresher session delivered by colleagues in the training department known as 'Mandatory Update'. This ensures a robust process to training the workforce regularly regarding IPC practices for assurance purposes and improved recording of training data.

3.2.4 The Table below provides an overall picture regarding a collective total of all the mandatory training offered throughout the year and compares figures to previous years. The Quality Account target set by NHS Sheffield Commissioning Group is to have trained 80% of staff in hand hygiene (HH) practices. The Trust has met this target by achieving **92%** at the end of Quarter 4. This is a substantial improvement whereby only 52%-57% compliance has been reported for several years prior to 2015.

3.2.5 The Infection Prevention and Control Team (IPCT) continue to deliver regular face-to-face training commitments e.g. Core Mandatory (Corporate Induction); to ensure that new staff are trained appropriately in IPC practices. Additionally, the IPCT continue to provide either roadshows or more bespoke presentations and ad hoc training sessions according to need; often identified post auditing or following-up on incident reporting trends or outbreaks of infection.

3.2.6 To retain credibility and validity of the infection prevention roles, the Lead Nurse and the Infection Prevention Control Co-ordinator (IPCC) have undertaken professional development through a variety of sources. Both staff are members of the Infection Prevention Society (IPS), which provides opportunities for networking at a regional and national level and access to appropriate educational study days and conferences. This year's three-day international conference was held in Liverpool during September 2019 and the Lead Nurse attended. Both staff members attend the IPS Special Interest Group (SIG) for Mental Health & Learning Disabilities; as well as their regional quarterly IPS branch meetings.

The Lead Nurse has now stepped down from her Branch Officer role in IPS Yorkshire Branch as the Educational Lead, which involved working at a regional and national level. The Lead Nurse is the Communications Officer for the newly formed national Care Homes SIG.

The Lead Nurse has successfully completed four MSc modules via distance learning and continues with her studies. Currently due to the unprecedented times we are facing due to Covid19, the Lead Nurse will be commencing dissertation in November 2020.

3.2.7 The IPC staff intranet page has been updated considerably over the last year whereby the resources offered to staff on a variety of IPC issues can be located centrally for easy access and reference.

3.3 Surveillance – Mandatory & Voluntary

3.3.1 The Health & Social Care Act 2008 (2015) requires organisations to provide quality information on Health Care Associated Infection (HCAI), antimicrobial resistant organisms and infectious diseases. This information is essential to monitoring the progress, investigating underlying causes and instigating prevention measures. The IPCT have developed a simple monitoring process for collecting voluntary data that involves a monthly surveillance survey, plus ad hoc reporting directly into the team by inpatient areas and care home settings. However; this does not extend to monitoring in the Clover Group GP practices under the Trust as this is undertaken by the Syndromic Surveillance Systems established by Public Health England (PHE).

3.3.2 The IPCT acknowledge that the data provided is not statistically robust, due to areas not complying fully with the requirement to gather the requested surveillance information or submit it in a retrospective timely manner. To try and improve this, the Lead Nurse met with the inpatient Governance Officers. The tables below identify the level of compliance by Clinical Care Networks in providing the relevant information and shows a comparison to last year's data. If the areas provide data more than 75% **(GREEN)** of the time (over the 12-month period); they are deemed as compliant. Returning data 50% - 75% of the time during the year equates to a caution **(AMBER)** and areas providing data less than 50% of the time are recorded as non-compliant with data returns and colour-coded **(RED).** Areas highlighted in **(BLUE)** have consistently submitted their data every month and in the required timeframe.

These tables clearly show where areas have either improved or fallen below expected standards. The level of compliance has been shared at the Infection Control Committee and referred to in the quarterly reports for Clinical Care Networks to address directly in the areas

of which they are responsible. Burbage Ward have made a significant improvement, Maple & Stanage Wards have decreased considerably and G1 have remained static.

Table 1a and 1b Surveillance Compliance

Surveillance Compliance April 2018 – March 2019	
Area	**Compliance %**
Acute	
Burbage	25%
Dovedale	83%
Forest Close	100%
Forest Lodge	83%
Endcliffe	50%
Maple	83%
Stanage	100%
Specialist	
Birch Avenue	100%
G1	50%
Woodland View	
Beech	closed
Oak	100%
Willow	100%
Community	
Wainwright Crescent	92%
Learning Disability	
Buckwood View	100%
Firshill Rise	92%

Surveillance Compliance April 2019 – March 2020	
Area	**Compliance %**
Acute	
Burbage	92%
Dovedale	75%
Forest Close	89%
Forest Lodge	100%
Endcliffe	67%
Maple	33%
Stanage	50%
Specialist	
Birch Avenue	100%
G1	50%
Woodland View	
Beech	Closed
Oak	100%
Willow	100%
Community	
Wainwright Crescent	100%
Learning Disability	
Buckwood View	100%
Firshill Rise	75%

3.3.4 Mandatory surveillance of Alert organisms continues to be collected and the table below shows the number of positive cases we have had for each organism this year. The Lead Nurse is very pleased to report **zero** cases for all alert organisms.

Table 2 Alert Organism Annual Cumulative Cases

Alert Organism	Annual Cumulative Case Total
MRSA Bacteraemia	0
MSSA Bacteraemia	0
***Escherichia Coli* Bacteraemia**	0
***Clostridium difficile* Toxin producing diarrhoea**	0

3.3.5 58 Urinary Tract Infection (UTI) cases (Service User who are not catheterised) and 5 cases in those with a urinary catheter insitu have been reported. Reported chest infections are recorded as 120. 223 Service User's prescribed inhalers or nebulisers this year. 37 Service Users are reported to have an invasive device insitu and 40 Service Users have a history of self-harming by breaking the skin; both of which increases their risk of infection as natural body defences are compromised. Wounds are reported as 59.

3.3.6 The reported numbers of antibiotics prescribed during this period is 284.

Annual Infection Surveillance Data: April 2019 - March 2020

Number of patients with known or suspected infections / infestations

Directorate	Infections																						
	MRSA Known or suspected	Other multi-resistant organisms e.g. ESBL, CPE	Diarrhoea (and/or) vomiting	Clostridium difficile (known or suspected)	Blood borne virus e.g. HBV, HCV, HIV Known or high risk	Known/suspected IV drug user	History of self-harm (breaking the skin only)	Invasive devices e.g. catheters, PEG or other	Number of patients had MRSA screens done this month	Chest infections/pneumonia or cough lasting 3 weeks or more	Influenza like illness	Urinary tract infection (no catheter insitu)	Urinary tract infection (catheter/suprapubic insitu)	Prescribed antibiotic treatment	Transferred from another hospital	Transferred from residential or nursing care homes	Wounds – include leg ulcers/surgical	Infestations(parasitic) e.g. head lice, pubic lice, scabies, thread worms	Cellulitis	Prescribed inhalers or nebulisers	TB – known history or suspected	Ear infections	Eye infections	Any other infections – please provide details
Acute Care Wards	1	0	5	0	7	6	26	7	33	12	1	11	1	39	25	6	19	0	7	32	2	1	1	7
Dementia and Nursing Homes	14	0	11	0	0	0	1	19	73	84	0	40	3	175	46	13	30	0	3	143	0	0	13	7
Forensic Services	0	0	0	0	0	2	10	0	10	0	0	1	0	25	8	2	6	0	0	19	0	8	0	11
Learning Disabilities	0	0	0	0	0	0	1	11	0	22	0	5	0	36	0	0	1	0	1	16	0	0	0	3
Mental Health Adult Social Care	0	0	0	0	2	0	0	0	0	1	0	1	1	2	0	0	0	0	0	0	0	0	0	0
Rehabilitation Services	0	0	4	0	0	0	2	0	11	1	0	0	0	7	12	1	3	0	1	13	0	0	1	1
Overall Annual Totals	**15**	**0**	**20**	**0**	**9**	**8**	**40**	**37**	**127**	**120**	**1**	**58**	**5**	**284**	**91**	**22**	**59**	**0**	**12**	**223**	**2**	**9**	**15**	**29**

3.4 Outbreak Summary

3.4.1 The table below summarises all the reported outbreaks over this reporting period.

Table 4 Reported Outbreaks

Date	Location	No of Patients	No of Staff	Outbreak Type	Causative Organism
May 2019	G1 (PII)	2	2	Enteric	Unknown
Oct 2019	Forest Close (PII)	1	3	Enteric	Unknown
March 2020	Dovedale Ward	12	4	Respiratory	Covid19
March 2020	G1	4	3	Respiratory	Covid19

3.4.2. Two short-lived periods of increased incidence (PII) occurred lasting 5 days each at Grenoside Grange and Forest Close as noted above. Faecal specimens did not reveal a causative organism. In both instances the unit/ward was closed by the Executive Director of Nursing / DIPC as a precautionary measure in view of the prolonged Norovirus outbreak experienced back in February 2019 at G1.

3.4.3 During March 2020 the Trust started to see its first cases of Covid19 identified in both staff and service users. The Covid situation was a rapidly evolving situation from January 2020 onwards, and at the time of preparing this report, inpatient areas are currently reporting zero cases. This has been an exceptionally challenging event in the organisation, in many aspects, and not just from an IPC perspective. Sadly, 2 patient deaths attributed to Covid19 occurred at Grenoside Grange. Dovedale ward experienced an outbreak, which to the credit of staff at both units, limited the spread to other areas of the Trust. During this time IPC support was provided virtually to both areas and subsequently to any other inpatient area who required advice/support to manage a Covid19 suspected or confirmed case.

For further assurance around Covid19, please refer to the separate Board Assurance Framework.

3.5 Summary of Meticillin Resistant *Staphylococcus Aureus* (MRSA) screening

3.5.1 MRSA stands for Meticillin Resistant *Staphylococcus Aureus*. *S.aureus* is a bacterium which is found on the skin and in the nose of up to 30% of healthy individuals; known as colonisation. It can cause a range of infections in susceptible individuals, including wound infection, abscesses and more serious blood stream infection known as bacteraemia. MRSA is a strain of *S.aureus* which has become resistant to a range of commonly used antibiotics such as Penicillin and Flucloxacillin.

3.5.2 People admitted to Mental Health Trusts do not need to be screened routinely for MRSA as there is no evidence of any significant risk of MRSA bacteraemia in this service user group. However, Service Users may have other clinical conditions that may put them at an increased risk of MRSA (see below) and thus a Bacteraemia; in this instance offering screening will be required.

3.5.3 The following Service User groups are considered to be at high risk of acquiring MRSA and therefore should be offered screening on admission to our services or upon transfer:

- those who are admitted to inpatient areas following surgical procedures.
- those that are admitted following admission to an Acute Trust including A+E

- those who are admitted from prison, nursing or residential care home settings.
- intravenous drug users.
- those who self-harm by breaking the skin.
- people with chronic wounds e.g. leg ulcers, or with indwelling devices such as urinary catheters or PEG feeding tubes.
- those who have previously been identified as positive for MRSA

3.5.4 To improve the recording and data extrapolation of screening activity, the IT Developers have made significant enhancements to the MRSA section contained within the PHA form. This included some automation and extra detail to the MRSA section on Insight e.g. recording declines; making this a mandated field on the form. However, the second stage of this piece of work relates to the computer programming detail which extrapolates the data from patients' records to produce an Insight report.

3.5.5 In addition to this, the developers have also created a separate report which individual wards can access to support and remind staff to complete MRSA screening. This report is available to all inpatient Governance Officers, so that they can track screening need and prompt nursing staff to offer and or complete outstanding screening.

3.5.6 To report screening data this year the admission source categories have been used to assist in data collection to identify where 'high risk' Service User sources may be admitted from. All Service Users admitted to the Trust should receive a Physical Health Assessment (PHA) and the relevant section should be completed on our Insight patient record system.

3.5.7 The newly developed report calculates our screening compliance as **56.94%** and that overall **38** service users declined the offer of screening.

3.5.8 During October 2019 the Lead Nurse delivered an MRSA training session to the Trainee Nursing Associates (TNA); which evaluated really well. These healthcare workers are ideally placed to promote screening activity within their clinical inpatient areas.

Acknowledgement: *Simon Robinson and Nalaka Vithanage, IT Developers*

3.6 Annual Audit Programme

3.6.1 The infection prevention and control audit programme is fundamental in monitoring and measuring standards within the Trust. The different audit tools utilised enable a robust picture to be demonstrated and encompasses the following domains: environment, care practices e.g. sharps practice, hand hygiene facilities, waste & linen management, decontamination of equipment, laundry rooms and personal protective equipment provision.

3.6.2 The use of the 3M CleanTrace device enhances visual observation during audits by detecting Adenosine Triphosphate (ATP) upon an inanimate object to determine acceptable cleanliness & hygiene standards. The device continues to be a successful way of supplementing the visual inspection conducted by the IPCT. The current ATP parameters set within the Trust are as follows: **Pass** = <500, **Caution** = 501 – 1,000 **Fail** = >1,001.

3.6.3 The IPCT have successfully completed **34** supportive face-to-face observational site visits and this year we did not require any areas to participated in self-audit. The environmental aspects of the audit look at the 'totality' of the healthcare environment i.e. assessing the standard of cleanliness and the 'fabric of the building'. The audits carried out this year have been 'unannounced' attempting to capture a realistic snap-shot of current cleanliness standards and compliance with IPC practices.

3.6.4 Compliance with the IPC audit is set at 90% and above; positively 16 areas are achieving a pass rating. 12 areas are achieving a caution rating. This means that those areas are reaching an audit score between 80% - 89%. However, 6 areas have failed their audit and Improvement action plans are in places for these areas; monitored by the Infection Control Committee and locally by Senior Operational Managers with support from Governance Officers.

3.6.5 The dashboard on page 4 shows a Pie Chart displaying the overall results attained this year and the Bar Chart provides a breakdown of pass/caution/fail results by directorate.

3.6.6 Where audit deficits had been identified, areas/services are responsible for producing their own improvement plans to address these issues. Should any challenges hindering completion of improvement plans be identified at a local level, they are escalated to the Infection Control Committee. All improvement plans are formally monitored by the Committee in their quarterly meetings. Areas failing to progress their actions are invited to attend the Committee for additional support and advice. A further announced supportive follow-up visit is made to the area 3 months after submission of the improvement plan to check on progress.

3.6.7 The audit results have highlighted some examples of common themes Trust-wide which require attention and improvement, these are:

- Bare Below the Elbow – compliance remains poor across the majority of areas
- Some areas are in poor decorative condition and escalated to Estates
- Sharps containers found to be unsigned/dated upon assembly and the temporary closure mechanism has not been activated on unattended containers
- Mixed compliance with departmental cleaning schedules for recording cleaning of reusable equipment
- The Wallgate anti-ligature toilets and sinks are stained across the board and the sinks are of particular concern with many of the outlets being heavily stained. This is not due to lack of cleaning, rather the design of the units and the composite material they are manufactured from making them very difficult to clean. This matter has been raised by the Lead Nurse and Hotel Services Manager at both the ICC and Water Safety Group.
- A number of fans require cleaning. This can be requested by contacting the Estates helpdesk.
- Carpets – where fitted – most are stained and/or worn.
- Several items of unclean reusable equipment noted.
- Out of date equipment in place – mostly blood tubes.
- Old/stained furniture in use in quite a few areas.
- Clearing away of cigarette butts still an issue.

3.7 Follow-up Bare Below the Elbow Audit

3.7.1 The final action of the Audit 360˚ action plan was to carry out a re-audit of BBTE compliance following the trust-wide introduction of uniforms in inpatient areas for nursing and support workers. The introduction of uniforms led by the Deputy Director of Nursing (Operations) has not progressed as quickly as expected, therefore the Executive Director of Nursing & Professions agreed that, in order to satisfy the actions of the Audit 360˚ action plan, the re-audit of BBTE would be limited to the 3 areas of the Trust currently in uniform (Woodland View, Birch Avenue and G1). Individual line managers are responsible for enforcing dress and appearance standards in their areas. The introduction of trust- wide uniforms will address professional image issues identified by the CQC. Excessive false nails, nail polish and rings are the major issues identified, and are widespread across these areas and this is consistent with our Audit findings highlighted in section 3.6.7.

The re-audits were all unannounced, taking place during December 2019. 8 random members of staff from each area and from a variety of roles were audited. The results in bold are the re-audit results and the bracketed figures are the inaugural results from 2018 - G1 **87.5%,** (86%) Birch Ave **90.6%** (96%) and Woodland View **93.7**% (85%) compliant. Both Birch Ave and Woodland View Nursing Homes continue to attain a pass rating (above 90% compliant) and G1 a caution, although they have improved slightly from last year (below 90%).

3.8 360° Assurance - Internal Audit of the Infection Control Service

The IPC service was previous audited last year by Assurance 360° to gain independent assurance that governance controls, systems and processes are being managed effectively and undertook onsite testing of infection control practices in a sample of 4 areas. An outcome rating of **'Significant Assurance'** was achieved. The review identified 3 medium and 5 low risk issues and an action plan to address and rectify these deficiencies had been developed & agreed to be progressed during 2019/20. The Lead Nurse is pleased to report that all actions have been completed within all agreed timeframes and supporting evidence provided to Assurance 360˚. Progress has been reported consistently via the quarterly performance reports and to the Infection Control Committee.

3.9 Patient-Led Assessment of the Care Environment (PLACE)

3.9.1 The PLACE is a Standards Monitoring Observational Assessment that focuses on environmental and non-clinical aspects of the service user's experience, which is led by the Hotel Services Manager. The process requires equal numbers of staff to service user / carer to be part of the inspection team. The standards consider multiple aspects which are food, privacy and dignity, condition / appearance and maintenance of the premises. For the purpose of this report cleanliness is the focus.

3.9.2 The overall Trust average for this year is slightly higher than the national average.

Table 5 PLACE Performance

Site	2016 Cleanliness %	2017 Cleanliness %	2018 Cleanliness %	2019 Cleanliness %
Firshill Rise	98.67	98.64	100.00	100.00
Forest Close	-	99.74	100.00	100.00
Forest Lodge	100.00	99.52	100.00	100.00
Grenoside Grange	100.00	100.00	100.00	98.63
Longley Centre	99.56	99.59	99.73	99.35
Michael Carlisle Centre	98.67	97.96	99.31	98.76
SHSC Average	**99.32**	**99.02**	**99.71**	**99.46**
National Average (all Trusts)	**98.06**	**98.38**	**98.50**	**98.50**

3.10 Mattress/ Commode Audits

3.10.1 Currently both the mattresses and commodes are audited monthly by the individual Wards / Nursing homes and remain their responsibility. To monitor this compliance areas are

asked to complete the relevant sections on the Surveillance returns which should be submitted monthly to the IPCT.

3.10.2 Mattresses have always been fundamental Medical Devices in healthcare; but often very unappreciated and overlooked. Mattresses remain the most consistently utilised service user surface, and without effective cleaning, maintenance protocols, and inspection regimes pose a serious risk to infection control practices and standards in the care environment. To ensure mattresses remain 'fit for purpose' and clinically effective it is recommended that their condition should be checked on a regular basis. Mattresses are currently being asset tagged in a piece of work led by the Medical and Therapeutic Devices Group.

3.10.3 Our mattress provider Herida Healthcare completed our annual audit in December 2019. Individual areas are responsible for and have subsequently submitted requisitions for new mattresses via the Procurement department. Findings from the audit are summarised below and were reported to ICC in January 2020.

- 160 mattresses were audited.
- 39 (24%) mattresses failed.

3.10.4 For completeness of the audit process, the Lead Nurse has emailed all the managers, Associate Directors and the Deputy Director of Nursing Operations with a link to the full mattress audit report summarising the results from all sites along with a reminder that individual areas are responsible for carrying out their own monthly mattresses audits. A link to this audit tool was also provided. Confirmation that the audit has taken place should be recorded via the Monthly Infection Surveillance Data Capture Returns form.

3.11 Antimicrobial Stewardship

3.11.1 An antimicrobial is a substance that kills or inhibits the growth of microorganisms (germs) such as bacteria, fungi, and viruses; and covers the effective use of antimicrobials (i.e. antibacterial, antiviral, antifungal and antiparasitic medicines) to reduce the emergence of antimicrobial resistance (loss of effectiveness of antimicrobials) to treat infections.

3.11.2 Antibiotic stewardship refers to a set of coordinated strategies (supported via NICE Guidance) to improve the use of antimicrobial medications with the goal of enhancing patient health outcomes, reducing resistance to antibiotics and decreasing unnecessary costs. The Trust antimicrobial guidelines were updated and approved in November 2019. The updated guidelines now include the requirement for all Trust prescribers, pharmacists and pharmacy technicians to complete an E-Learning course titled 'Introduction to antimicrobial resistance package'.

3.11.3 Antimicrobial stewardship is a core responsibility for all Trust and the Pharmacy Department take a lead on this to ensure antibiotic compliance. An overview of the numbers of Service User receiving antibiotics throughout the year is recorded by the Infection Prevention Team via the surveillance forms submitted by each inpatient area; which is shared with the Pharmacy department to assist with their auditing process.

3.11.4 The auditing process on the use of antibiotics is being revised by Pharmacy with the Infection Prevention and Control Lead Nurse; this will be in line with resource provision. Pharmacy and IPC will be working together to ensure prescribing and use of antimicrobials is reviewed on a consistent basis and feedback provided to prescribers on inappropriate choices in order to improve appropriate usage and have better antimicrobial stewardship.

3.12 Incident Reporting: Sharps Practice & Audit

3.12.1 A total of **83** incidents have been reported to the IPCT during this reporting period. This is a significant increase from last year (20). A considerable number of the reported incidents relate to one challenging individual who continually smears faeces.

3.12.2 Other types of incidents reported summarised below:

- Deliberate biting and spitting of saliva towards staff
- Human excrement outside Trust premises
- Healthcare waste – investigated by the Waste Lead
- Clean needlestick injuries

3.12.3 There have been **8** contaminated/dirty sharp related incidents reported. These relate to poor sharps practice, for example leaving sharps discarded in clinic rooms after incidents, not reporting inoculation injuries and staff not adhering to Insulin administration protocol, for those patients who self-administer. These incidents were addressed by ward managers and the Lead Nurse reiterated the correct procedures to be followed when administering Insulin and has raised the issue with Physical Health Team.

Table 6 Contaminated (Inoculation Injuries)

Date	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020
Contaminated Needlestick injuries sustained by staff	2	4	5	8

3.12.4 Daniels Healthcare facilitated an annual Trust-wide audit during April 2019. 34 Trust areas/departments were visited and a total of **82** bins were observationally audited this year. Overall many elements remained consistent however, the following areas remain a concern:

- 3 bins found with the wrong lid on the wrong base.
- 6 bins unlabelled whilst in use.
- 6 bins with significant inappropriate contents.
- 2 bins left unattended without the temporary closure activated.

3.13 Staff Influenza Vaccination Campaign

3.13.1 Influenza can cause a spectrum of illness ranging from mild to severe, even among people who consider themselves as previously well, fit and healthy. The impact on the general population varies from year to year depending on how many people are susceptible, any changes to the influenza virus and the severity of the illness caused by the strain in circulation. The capacity for the virus to mutate/change and the duration of the protection from the vaccine (about one season), are the reasons that the vaccine is tailored each year to protect against the most commonly circulating strains and why annual vaccination is necessary.

3.13.2 Every year influenza vaccination is offered free to NHS staff as a way to reduce the risk of staff contracting the virus and transmitting it to the Service Users in their care; protecting themselves and their own families. This year the HR Department led on delivering

the campaign to our staff. The Trust achieved an uptake rate of **51.5%** which is a very slight decrease from 52.9% from the previous season.

3.13.3 Encouraging more staff to get vaccinated remains a significant challenge to the Trust and as with previous years there continues to be a core cohort of staff that refuses the vaccine due to personal attitudes that they believe that the annual influenza vaccine will not be of benefit to them. Traditionally we are one of the lowest performing Trusts in the country; and have been for a considerable number of years.

3.13.5 The CQUIN target for frontline staff was an uptake rate of 80%. Although NHS England had an ambition to have 100% of Frontline HCW vaccinated. The Organisation is aware that this year's new CQUIN target is 90% for the 20/21 season.

3.14 Decontamination & Cleanliness of the Environment

3.14.1 While significant progress has been made in improving cleanliness across the Trust standards must be maintained and improvements sustained. All staff should be aware of their roles and responsibilities with regard to cleaning and decontamination. Clinical and support staff undertaking the cleaning of reusable equipment must be trained in the correct cleaning and decontamination procedures.

3.14.2 When new items of equipment are considered for purchase, the manufacturer's advice on cleaning must be sought and training if necessary must precede use. The IPCT promote that careful consideration should be given to the consequences of the purchase of any item of equipment that is not capable of being cleaned or decontaminated to appropriate IPC standards, unfortunately this is not always the case in the Trust. However, the Medical Devices and Therapeutic Equipment Group has been supporting this coupled with the new Procurement Policy which should help to improve processes regarding standardisation, purchasing and decontamination issues.

3.14.3 A visibly clean environment will provide reassurance to Service Users that they are receiving safe care in a clean environment. A clutter-free environment and the adoption of local 'clean as you go' attitude will provide the foundation for delivering high-quality care in a clean, safe place.

3.14.4 The Hotel Services Manager has been proactively supporting staff with the monthly Environmental Cleaning Audit process. The Senior Housekeepers undertake peer review on a quarterly basis and the Lead Nurse and Hotel Services Manager undertake an annual 'management review' to validate/review the consistency of the audit process and monitor the standards of cleanliness. Cleanliness scores are reported quarterly via the IPC Performance reports which are received by the Clinical Care Networks. However due to the Covid19 situation and resource and capacity issues, management audits have not been completed in Q4. The peer review process is temporarily suspended at the moment whilst clinical areas have been coping with suspected or confirmed cases and to restrict housekeeping staff from visiting multiple areas of the Trust. Monthly Environmental Cleaning Scores continue to be monitored as per normal practice by the Hotel Services Manager during this time.

3.14.5 Inspections of main kitchen environments are now audited as a separate process by the IPCT and Hotel Services Manager on an annual basis. These audits supplement any inspections carried out by the Local Authorities Environmental Health Officers. However, as per the above statements around Covid19 management, these audits have not taken place.

3.15 Water Quality & Safety

3.15.1 Annual Audit by a Trust-Appointed Independent Water Consultant:

- All Trust-owned and leased properties have up-to-date legionella risk assessment, this is to be reviewed determined on Compass ppm completion.
- Estate services management and maintenance personnel have completed training and have the expertise to fulfil statutory requirements.
- The Trust's appointed Water Quality consultants and Authorising Engineer (AE) reported that the Trust has a robust system in place to prevent the build-up of organisms such as legionella and pseudomonas in its water systems.
- Planned preventative maintenance (ppm) continues to be carried out at all properties though frequencies vary due to availability of maintenance personnel. It is hoped that with the employment of additional personnel completion of ppm will improve.
- The Water Quality Steering Group (WQSG) is well attended with clinical and non-clinical representatives, the last meeting was virtual due to the current pandemic. The group was set up to comply with recent legislation and implement actions to ensure water quality is maintained throughout trust premises. The group also comments and makes recommendations as a result of Audits and Risk Assessments. Crucially it provides advice and input into Capital Schemes. It is hoped that the group will be attended by a range of representatives from Trust Directorates. Reports are received at the ICC.
- A Water Safety Plan has been developed and its requirements enforced.
- Sampling for Pseudomonas continues to be carried out on an annual basis as agreed at the ICC.
- Action plans have been drawn up for all remedial work highlighted in Risk Assessments and is on going
- Water Quality pre-planned maintenance at some sites is being completed by the use of a new web based software system (Compass) and a hand-held device, this is real time and enables completion of statutory documentation. Numerous sites across the Trust are now completing flushing records on line
- The Water Quality Policy has been ratified and is on the Trust intranet.

Annual Site Summary in Brief

Michael Carlisle Centre
The site overall has had good water quality results from samples taken. Various small schemes of work have been carried out in accordance with Policy.

Grenoside Grange
Samples taken from the site show no evidence of bacterial build up; the chlorine dioxide unit continues to disinfect the water system. The planned upgrade of the hot and cold-water distribution system is currently on hold.

Longley Centre and PICU
The water system appears to be under control with no bacterial counts from recent samples. The water supply to Hawthorn and Pinecroft remains isolated with the exception of the kitchen corridor. One of the Cold-Water Storage Tanks remains isolated.

Rowan Ward is now the Decisions Unit, a new water system was installed, disinfected and commissioned for use. Hydrop were consulted on the installation, recommendations following an audit will be implemented.

Woodland View Nursing Home
The new hot water generation system continues to provide the required hot water supply for the whole of the site. Chlorination of the system and reduced cold water storage has resulted in better water quality. Flushing on Chestnut continues to be monitored as elevated cold-water temperatures have been detected which indicates little use of the water system. Water to Beech cottage has been reinstated, chlorinated and tested due to covid requirements.

Forest Lodge
Alterations to clinic rooms required some disinfection, sampling confirmed water quality had been maintained.

Forest Close
Bungalow 3 is currently unoccupied and all outlets flushed on a daily basis. Water system chlorinated and all outlets cleaned due to covid requirements.

Longley Meadows
The unit is currently unoccupied; Estates colleagues continue to carry out daily flushing of all outlets.

Cold Water Storage Tanks
All cold-water storage tanks are to undergo a thorough inspection with a view to cleaning where required.

4 Acknowledgements

The SNIPC wishes to acknowledge the following colleagues in providing the information & data used to produce this report:

- Jill Perlstrom-Wright - Infection Prevention and Control Co-ordinator
- Tracy Green – Governance Data Management Officer
- Mark Gamble – Head of Estates / Water Responsible Person
- Janet Mason - Hotel Services Manager
- Paul James - Information Assistant, Risk Management Team
- Abiola Allison – Chief Pharmacist
- Alison Bremner – IPC Administrator

Appendix 1

INFECTION PREVENTION & CONTROL 2020 - 2021 ANNUAL PLAN

	= Work not commenced
	= Work not completed
	= Work in progress
	= Action on-going
	= Complete

Objective Area (39)	Action/Activity – to support CQC Fundamental Standards and Health & Social Care Act, Code of Practice	Timescale	Lead	Quarterly Progress/Assurance	RAGB
Training & Education ***Providing opportunities for all staff to fulfil mandatory requirements to receive IPC training.(6)***	Continue to facilitate Corporate Induction & Mandatory IPC session along with Education Departmental Trainers	March 21	E&T / New Band 6		
	Start to plan, organise & facilitate a full day's IPC & PH conference on behalf of the Trust	Jan 21	KG / KV		
	Provide ad-hoc sessions on a variety of IPC related elements/topics as and when approached by services/areas	March 21	KG / New Band 6		
	Facilitate IPC week or other national campaigns across the Trust promoting evidence-based best practice	March 21	New Band 6		
	Develop & deliver a teaching session to staff on Covid19 (PPE and SICP)	June 20	KG		
	Asses the need for and develop an ANTT training and competency framework for Nursing staff	March 21	New Band 6		
Audit ***Monitor compliance with IC policies & guidance through a Programme of audit.(7)***	Develop and carry out a unannounced programme of audit, including across Care Networks for example services in: • Single Point & Crisis & Emergency Care • Scheduled & Planned • Acute Bedded Based Services • Care Homes x3 **Areas where suboptimal compliance is identified; areas must produce a remedial improvement plan to address findings.* **Services/areas to take ownership regarding progression of an improvement plans and to report issues hindering completion both at a care network governance level and via the ICC*	Feb 21	New Band 6		
	Local Audit Tool to be reviewed	Sept 20	KG		

Objective Area (39)	Action/Activity – to support CQC Fundamental Standards and Health & Social Care Act, Code of Practice	Timescale	Lead	Quarterly Progress/Assurance	RAGB
	To receive the audit data collected by Daniels in relation to Sharps Policy & practice. **Daniels Healthcare dependent**	Oct 20	KG		
	To carry out an audit of the hypodermic safety needle practice used within the Trust (EU Safer Sharps Directive)	Feb 21	New Band 6		
	To receive the quarterly audit data collated by pharmacy in relation to antibiotic prescribing findings and make recommendations for improvements in antibiotic stewardship (Antimicrobial Resistance Strategy DH,2013). **To promote prudent antimicrobial prescribing for the management of antibiotic resistance and reducing antibiotic related Clostridium difficile Infection and other Healthcare Associated Infections*	Quarterly Until March 21	Pharmacy Medicines Safety Officer		
	Develop & carry out a programme of audit on mattresses across the Trust to ascertain how mattresses are performing	Dec 21	KG / JPW		
	Participate in the multi-disciplinary PLACE Assessments trust wide	Feb 20	Hotel Services		
Surveillance – Mandatory & Voluntary ***In line with National/Local requirements and designed to achieve reduction in HCAI (2)***	Continue to collate & monitor the voluntary prevalence data to understand how many individuals are affected by a disease or infection at a particular time, and monitor any trends which develop.	March 21	KG / New Band 6		
	Continue to monitor & report against the Mandatory Alert Organisms (MRSA, MSSA, E-coli Bacteraemia's & Clostridium difficile) **Supporting the reduction in Gram Negative infections*	March 21	KG / New Band 6		
Policies & Protocols ***Ensure compliance with current guidance & legislation to promote quality, evidence based best practice (2)***	To review the Prevention of Sharps Injuries and Prevention of Exposure of Blood and Body Fluids Policy.	Jan 21	KG		
	To contribute to all policies or protocols that has relevance to infection prevention and control.	March 21	KG		
Preventative & Case work ***Activities to demonstrate that***	Facilitate *Clostridium difficile* Root Cause Analysis (RCA) Investigations in a timely manner as required. *Lessons Learned to be shared within the service and brought to the attention of the ICC and Care Network via quarterly reporting*	As cases arise	KG / RT KG		

Objective Area (39)	Action/Activity – to support CQC Fundamental Standards and Health & Social Care Act, Code of Practice	Timescale	Lead	Quarterly Progress/Assurance	RAGB
effective IPC is central to providing safe, high, quality service user-centred healthcare (11)	Complete MRSA Bacteraemia Post Infection Reviews (PIR) within the timescales specified by the DH. *Lessons Learned to be shared within the service and brought to the attention of the ICC and care Network via quarterly reporting*	As cases arise	KG / RT KG		
	To support the Deputy Director of Nursing Operations to introduce 'accreditation' in regards to IPC	March 21	AB / KG		
	To work collaboratively with the H&S Lead and wider MDT regarding IPC related Safety Alerts.	As released	KG		
	To review and interpret any new IPC national guidance for its relevance and introduction into the Trust (e.g. NICE)	As released	KG		
	IPC related incidents to be monitored and lessons shared appropriately.	March 21	KG		
	IPC risks being appropriately reported/escalated for inclusion on the Directorate Risk Register.	March 21	KG		
	Continue to support the compliance with the Sharps Directive particularly around safety devices; review the risk assessment following audit	March 21	CS / KG		
	Support all areas whereby facilitating outbreak management and to promote appropriate 'terminal cleaning' prior to re-opening to admissions	On-going	KG / New Band 6		
	All service user results are management as a priority e.g. MRSA Bacteraemia's / C-diff / CPE. Liaise with appropriate services/clinicians/GP's	On-going	KG		
	To ensure that there is IPC involvement into the procurement process to confirm that equipment & therapeutic devices can be appropriately cleaned & decontaminated.	On-going	KG / Procurement		
Design, Planning refurbishments & New Premises ***To ensure that premises are designed & furbished to enable IPC practices to flourish. (1)***	Provide specialist advice and decontamination requirements of all proposed capital refurbishments and new developments from design, planning through to final commissioned state. **To ensure that the fabric of the environment facilitates the cleaning process & that IPC is 'designed-in'.*	March 21	KG / GR / JB RT		

Objective Area (39)	Action/Activity – to support CQC Fundamental Standards and Health & Social Care Act, Code of Practice	Timescale	Lead	Quarterly Progress/Assurance	RAGB
Estates Functions, Water Quality & Safety **Promoting holistic management towards water systems to control waterborne pathogens, the ongoing maintenance of our healthcare premises and waste disposal (4)**	Support Estates with monitoring Water Quality including active participation in the Water Safety Group	March 21	MG / KG / RT		
	Support Estates with quarterly reviewing the Water Quality risk assessments	March 21	MG / KG / RT		
	Collaborative Estate visits to all areas to identify IPC issues relating to the *'fabric of the building'* before they become problematic	Quarterly as required	DM / KG		
	Support Waste Lead to assess current practice regarding the safe transport of clinical waste whilst conducting home visits	Oct 20	SE		
Environmental Cleaning & Decontamination ***Activities to demonstrate that IPC & cleanliness are an integral element of the quality agenda (6)***	Support Hotel Services with reviewing standards of cleanliness across sites; report monthly environmental audit scores and Senior Housekeeper 'peer review' auditing cycle	March 21	JM		
	Continue with annual Management Review Cleanliness Inspections/ walk-rounds.	March 21	KG / JM / JPW		
	Support Hotel Services with annual Kitchen inspections to all main food producing sites	March 21	JM / New Band 6		
	Support Hotel Services in finding an alternative to Virusolve	March 21	JM / KG		
	Support clinical staff/teams in devising/renewing their departmental cleaning schedules	March 21	KG / New Band 6		
	Review of the Housekeeping Specification Document **Dependent of release of newly revised NHSE Cleaning Manual expected 2020*	TBC	JM / KG		