Bradford Teaching Hospitals
NHS Foundation Trust

Board of Directors: 12.07.18
Agenda Item: Bo.7.18.38

INFECTION PREVENTION AND CONTROL ANNUAL REPORT 2017/18 AND ANNUAL WORK PLAN 2018/19

Presented by:	Karen Dawber, Chief Nurse/ DIPC	**Author:**	Claire Chadwick, Nurse Consultant Infection Prevention
Previously considered by:	Infection Prevention and Control Sub-Committee Quality Committee – 27.06.18 (Agenda item Q.6.18.10)		

Key points	**Purpose:**
1. There have been 4 MRSA bacteraemia cases allocated to the Trust since April 2017.	To receive
2. *18 Clostridium difficile* infection reported cases against a set trajectory of 51 and therefore achieved a 40% reduction in Trust attributed cases.	To receive

Executive Summary:

- *18 Clostridium difficile* infection reported cases against a set trajectory of 51 and therefore achieved a 40% reduction in Trust attributed cases.
- The number of E.Coli bacteraemia cases also reduced by 26.8%, which received recognition from NHS Improvement as one of 59 Trusts who have achieved 10% or greater reduction in hospital onset cases.
- The Trust has reduced the number of attributed Meticillin resistant *Staphylococcus aureus* (MRSA) bacteraemia cases from 6 in 2016/17 to 4 in 2017/18; an improvement on last year's performance however against a national objective of zero tolerance for MRSA blood stream infections and remain above the national average rate.
- Challenges have also included a higher than the national average rate of Meticillin Sensitive *Staphylococcus Aureus* (MSSA) cases.
- The significant impact over the winter period from higher than seasonal average for Influenza A/B.
- Appendix 5 is the annual work plan proposed for 2018/19 in line with the Health and Social Care Act (2008): Code of Practice for the NHS on the prevention and control of healthcare associated infections and related guidance (commonly known as The Hygiene Code).

Financial implications:
No

Regulatory relevance:

Monitor:	Quality Governance Framework

Equality	

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Impact / Implications:	**Is there likely to be any impact on any of the protected characteristics?** (Age, Disability, Gender, Gender Reassignment, Pregnancy and Maternity, Race, Religion or Belief, Sexual Orientation, Health Inequalities, Human Rights) Yes ☐ No ☒ If yes, what is the mitigation against this?

Other:	

Strategic Objective: *Reference to Strategic Objective(s) this paper relates to*	To provide outstanding care for patients
	To deliver our financial plan and key performance targets
	To be in the top 20% of NHS employers
	To be a continually learning organisation
	To collaborate effectively with local and regional partners

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INFECTION PREVENTION AND CONTROL ANNUAL REPORT 2017 - 2018

1. Executive Summary

1.1 Bradford Teaching Hospitals NHS Foundation Trust recognises the obligation placed upon it by the Health and Social Care Act 2008 (Regulated Activities) Regulations 2014: Regulation 12(2)h, to comply with the Health and Social Care Act 2008: code of practice on the prevention and control of infections and related guidance. The Trust supports the principle that infections should be prevented wherever possible or, where this is not possible, minimised to an irreducible level and that effective systematic arrangements for the surveillance, prevention and control of infection are provided within the Trust.

1.2 The Trust experienced both success and challenges during 2017/18 with regard to Healthcare Associated Infection (HCAI) objectives:

- *18 Clostridium difficile* infection reported cases against a set trajectory of 51 and therefore achieved a 40% reduction in Trust attributed cases.
- The number of E.Coli bacteraemia cases also reduced by 26.8%, which received recognition from NHS Improvement as one of 59 Trusts who have achieved 10% or greater reduction in hospital onset cases.
- The Trust has reduced the number of attributed Meticillin resistant *Staphylococcus aureus* (MRSA) bacteraemia cases from 6 in 2016/17 to 4 in 2017/18; an improvement on last year's performance however against a national objective of zero tolerance for MRSA blood stream infections and remain above the national average rate.
- Challenges have also included a higher than the national average rate of Meticillin Sensitive *Staphylococcus Aureus* (MSSA) cases.
- The significant impact over the winter period from higher than seasonal average for Influenza A /B.

2. Report Scope

2.1 This report covers the period for the financial year 2017/18 and demonstrates progress against the annual infection prevention programme for 2017/18 and in achieving compliance with national standards and performance indicators.

2.2 The Infection Prevention and Control Sub Committee (IPCsC) met on the following dates:

- 7.4.17, 5.5.17, 2.6.17, 4.8.17, 1.9.17, 3.11.17, 1.12.17, 5.1.18, 2.2.18, 2.3.18

2.3 Quorum for meetings is 7 members including the Chair and all meetings were quorate.

2.4 The report provides assurance to the Board of Directors by monitoring the activity of infection prevention and control and identified key issues are noted. The Committee is requested to note the enclosed report and support actions arising from the recommendations identified within

the report. The Committee is also asked to note the report in relation to compliance with corporate objectives; the Health and Social Care Act 2008: Code of Practice for the NHS on the prevention and control of healthcare associated infections and related guidance (commonly known as The Hygiene Code) and the National Cleaning Standards. The report includes a summary of activity from the following related sub-group representatives:

- Decontamination
- Water safety
- Environmental cleaning

2.5 Appendix 5 is the annual work plan proposed for 2018/19 which reflects the gap analysis completed in March 2018 that reviewed the Trust's compliance with the Health and Social Care Act (2008): Code of Practice for the NHS on the prevention and control of healthcare associated infections and related guidance (commonly known as The Hygiene Code).

3. Strategic Context

The infection prevention programme of work continues to be delivered to provide assurance on compliance with:

- NHS Outcomes Framework – Domain 5: Treating and caring for people in a safe environment and protecting them from avoidable harm.
- Health and Social Care Act 2008: Code of Practice for the NHS on the prevention and control of healthcare associated infections and related guidance (commonly known as The Hygiene Code).
- NICE guidance (QS 61); NICE Clinical Guideline 139.

4. Objectives for reduction of HCAIs.

- The objectives for reduction for *Clostridium difficile* infections (CDI) cases for 2017/18, is calculated based on a stretch trajectory from 2014/15 and has been continued from 2015/16 objective as 51 cases for this year.
- The objective for MRSA bacteraemia remains as zero tolerance.
- In May 2017, the Secretary of State for Health launched an ambition to reduce healthcare associated Gram-negative bloodstream infections (e.g. E.Coli, Klebsiella and Pseudomonas bacteraemia) by 50% by 2021 and reduce inappropriate antimicrobial prescribing by 50% by 2021. Whilst there is no set objective, NHSI have stated the ambition to reduce all *E. coli* BSIs by 10% in 2017 and therefore all Trusts have been monitored during 2017 and support offered to those Trusts who are not achieving the reduction.

4.1 Objectives for reduction of MRSA bacteraemia:

The Trust has reported 4 attributed MRSA bacteraemia cases during 2017/18. The 4th case was reported in January in Intensive Care Unit. Figure 1 is a statistical process (SPC) chart showing the day interval between Trust allocated cases from April 2013 to present. The average days between

cases for 2017/18 is 123 days compared to 70 day average interval in 2016/17, however statistically the data shows no significant trend over this period.

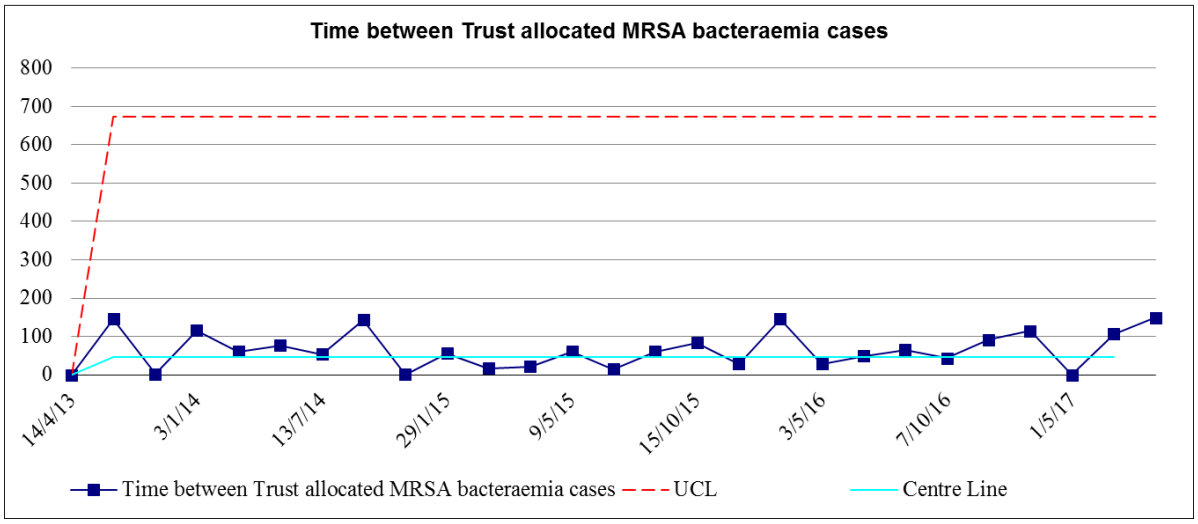

Figure 1

4.1.1 Divisional Cumulative Total MRSA Bacteraemia

Table 1 shows the cases per division responsible for the area where the blood culture was taken.

Medicine	Surgery and Anaesthetics	Women's & Children
1	3	

Table 1

4.1.2 Post-infection Review (PIR) of MRSA bacteraemia cases

The PIRs are presented to the IPCsC meetings and actions plans to correct any lapses of care are formulated and monitored through the committee for assurance of completion. Lapses of care relate to lapses that may be associated with the root cause or found incidentally during the PIR. The Trust's rolling 12 month rate for MRSA bacteraemia has been reported through PHE Fingertips data, as 5.5 compared to the average for England of 2.4 (data up to December 2017).

4.2 MSSA Bacteraemia

Figure 2 is a statistical process chart showing the time between Trust allocated MSSA bacteraemia cases from April 2015 to present. Statistically, the data shows no significant trend over this period and therefore any improvement programmes in clinical practice have not reflected a reduction of Staphylococcal infections.

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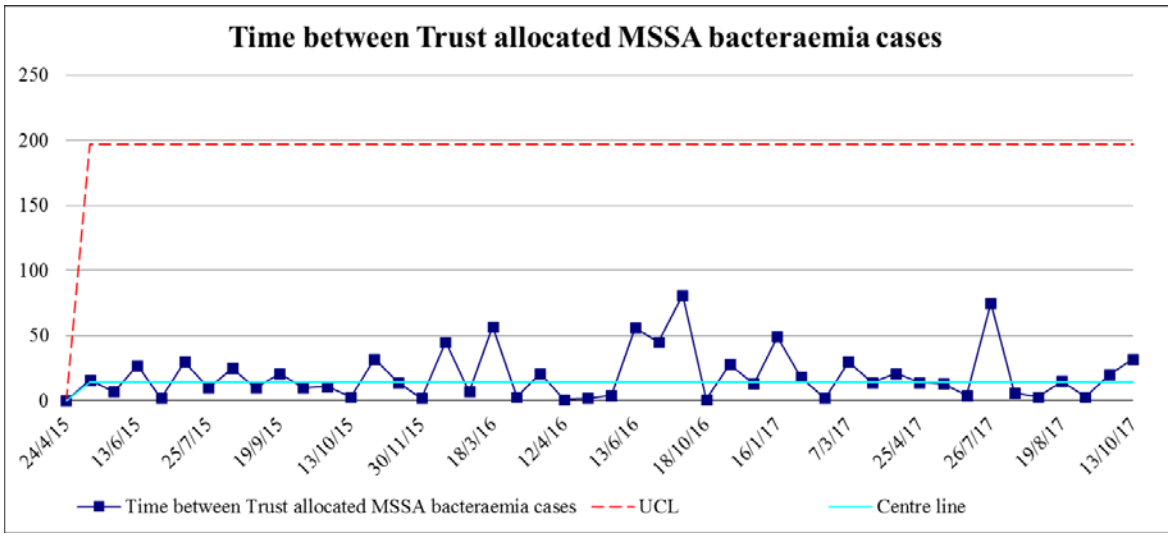

Figure 2

4.2.1 Table 2 below is taken from Public Health England Fingertips data and highlights the Trust's rolling 12 month rate for MSSA bacteraemia compared to the average for England (data up to January 2018).

Area	Count	Value
England	252	9.1
Bradford	3	13.5

Table 2

4.2.2 **Key themes from the Post-infection Review (PIR) of MRSA and MSSA bacteraemia cases**

A review of the 2017/18 PIR investigations have highlighted the insertion and care of invasive devices as a key area for improvement:

- A significant proportion related to cannula phlebitis
- Infected dialysis graft
- Infected supra- pubic catheter
- Patients had multiple cannulations (up to 8 in one admission)
- Central line, PICC lines also featured as a frequent source of the bacteraemia
- A common risk factor was patients with history of Alcoholic liver disease.
- Visual infusion phlebitis (VIP) observations were not consistently documented

4.2.3 **Actions to support reduction of *Staphylococcus aureus* (MRSA and MSSA) Bacteraemia**

- As part of the annual infection prevention work plan for 2018/19, an improvement programme for the care of intravascular devices will commence including the recommencement of the Aseptic Non-Touch Technique (ANTT) programme. This will be developed to ensure all appropriate healthcare professionals undertake a practical assessment through a cascade training and assessment programme.

- Audit of IV devices will also be instigated to identify the current incidence of phlebitis and support the ward clinical teams with feedback and training for VIP observations and documentation.
- A focus on the fundamentals of infection prevention practices will also receive focussed improvement drive as part of the work plan. This will include hand hygiene compliance, appropriate use of personal protective equipment (PPE) and a safe environment (cleaning standards).

4.3 Clostridium difficile infection

4.3.1 Objectives for the Reduction in *Clostridium Difficile* infections (CDI)

There have been *18 Clostridium difficile* infection reported cases (>3 days post admission) attributed to the Trust against a set trajectory of 51 and therefore achieved a 40% reduction in Trust attributed cases.

Figure 3 shows the provenance of cases since April 2017. Typing of all cases that are possibly connected to look for evidence of cross infection continues and has not shown connected cases.

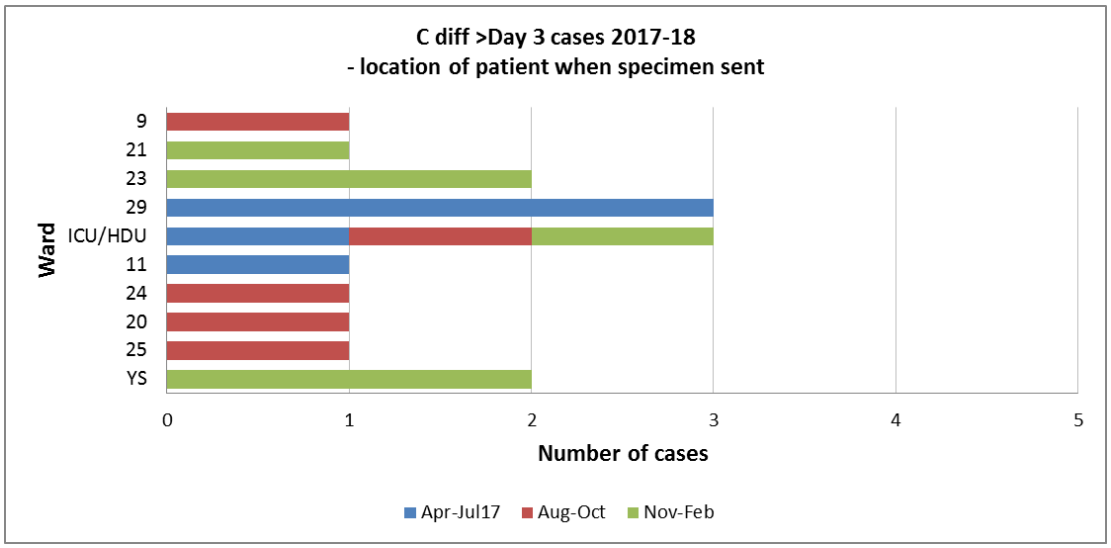

Figure 3

The SPC chart (figure 4) below identifies the rate of CDI cases per 1000 bed days and highlights a special cause identified from April 2017 onwards. This is currently being explored to clarify the systems and processes that may have attributed to this special cause. However, concerns have been raised with both the IPN team and Microbiology/Infectious Diseases in relation to the change in laboratory correlating with the unexpected decline in cases in April 2017.

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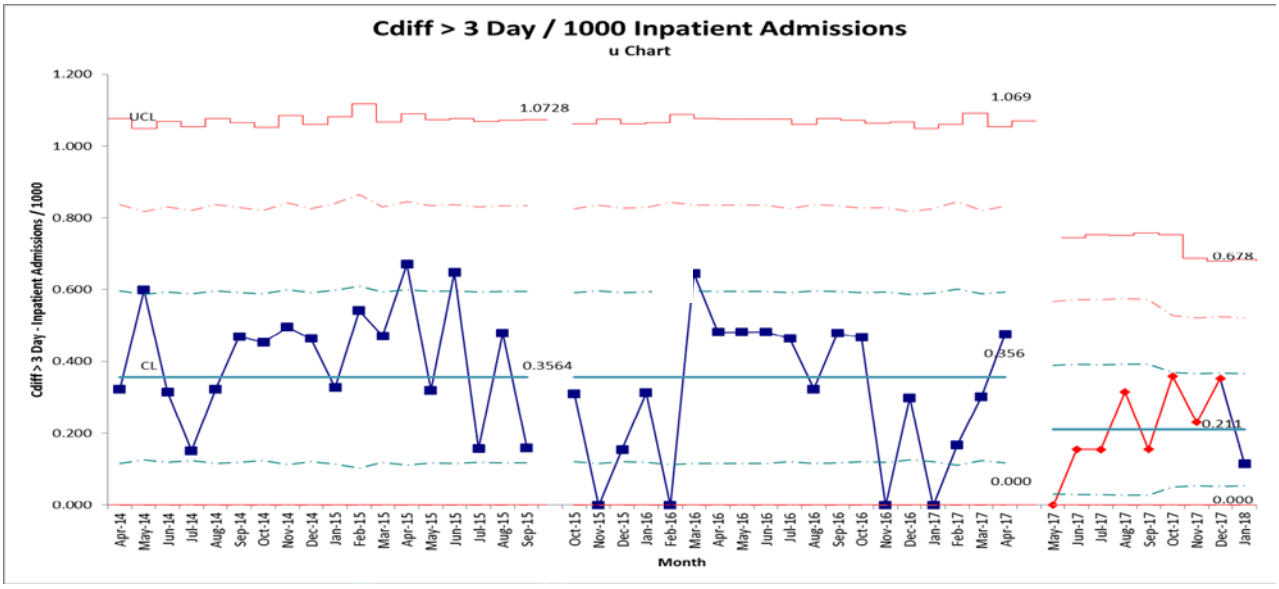

Figure 4

4.3.2 Post-infection Review (PIR) of C difficile cases

The PIRs are presented to the Divisional IPC meetings monthly and actions to correct any lapses of care found are formulated and checked for completion. Ward 29 has reported 3 hospital associated CDI cases this year, however this is due to patients being transferred to the ward with diarrhoea for isolation in a side-room and most likely did not originate on that ward. ICU/HDU cases require further scrutiny to ensure antimicrobial prescribing and infection prevention protocols are robust.

4.4 Gram-negative Bacteraemia

- Department of Health launched new plans to halve the number of gram-negative bloodstream infections by 2020; this is primarily in relation to E coli bacteraemia which is part of the national mandatory reporting of HCAIs.
- E.coli bacteraemia are primarily associated with urinary tract infections and biliary sepsis and the majority of these infections are community associated (i.e. identified within the first 48hrs of admission).
- Public Health England (PHE) states that the rates have increased by 25.8% overall, between Q1 2013 and Q1 2016, with seasonal peaks generally reported between July and September each year.
- The Department of Health's plan to reduce these infections includes:
    - More money for hospitals making the most progress in reducing infection rates with a new £45 million quality premium
    - Independent Care Quality Commission (CQC) inspections focusing on infection prevention based on E. coli rates in hospitals and in the community, and taking action against poor performers

  - The NHS publishing staff hand hygiene indicators for the first time and displaying E. coli rates on wards, making them visible to patients and visitors in the same way that MRSA and C. difficile are currently
  - Improving training and information sharing so NHS staff can learn from the best in cutting infection rates and appointing a new national infection lead, Dr Ruth May
- The Trust's IPC team has joined colleagues in the CCGs and BMDC Public Health to have a joint approach to improvement initiatives. The IPC team has also participated in a Performance Improvement Network event in December 2017, facilitated by NHS Improvement and PHE to share learning about reducing Gram-negative bloodstream infections.
- Joint improvement programme work will include promoting hydration to prevent urinary tract infections and a quality improvement programme to implement a patient hand hygiene model. These will be reflected in the Trust annual infection prevention work plan for 2018/19.
- Figure 5 SPC chart highlights a reduction over time for hospital associated E Coli bacteraemia, but is not yet statistically significant.

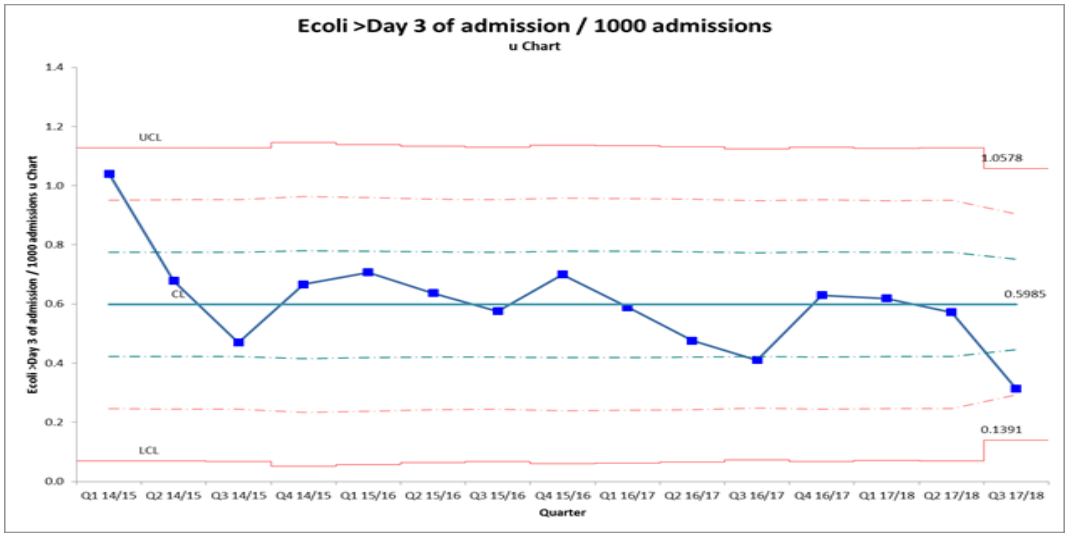

Figure 5

- A PIR process was introduced for the infections diagnosed day 3 or more of admission that are more likely to be healthcare associated. This process is currently under review to focus investigation where lapses in care or breach of policy are identified. These cases will be reported through the clinical incident reporting system and will also align with Governance processes.
- The most common source for Gram-negative bacteraemia is the urinary tract. Audits of urinary catheter care bundle use and of catheter related urinary infection (Safety Thermometer) are in place and are showing good compliance and low rates of infection. The audit process will be reviewed to ensure that this is giving an appropriate picture.

4.5 Carbapenemase-producing Enterobacteraciae (CPE)

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Figure 6 shows the number of CPE cases admitted to BTHFT since April 2013. There were 2 new sporadic cases with no linked cases during November 2017 – February.

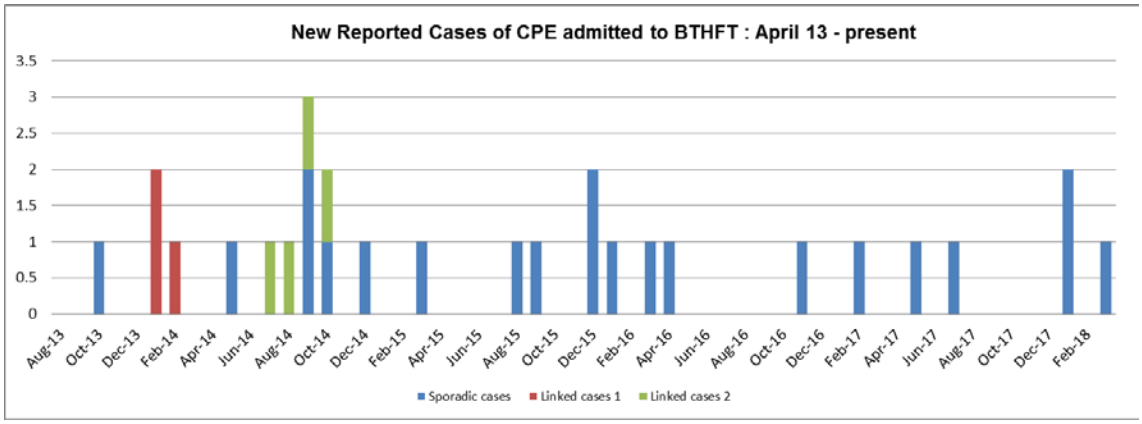

Figure 6

5 Outbreaks and Bay/Ward closures

5.1 Table 3 below identifies incidences of partial or full ward closures during 2017/18. All incidences were contained through bay cohorting, additional and enhanced cleaning protocols and supported by daily assessment from the IP team.

Month	Ward	Patients	Staff	Date of first Symptoms	Date of last Symptoms	Days affected	Agent
January	Ward 14	5	0	04/01/2017	06/01/2017	2 days	None identified
	Ward 22	4	0	05/01/2017	07/01/2017	2 days	None identified
	Ward F5	6	0	22/01/2017	01/02/2017	11 days	Norovirus
	Ward 27	3	0	30/01/2017	01/02/2017	3 days	None identified
March	Ward 12	5	2	1/3/2017	04/03/2017	3 days	Norovirus
	WWP CH	3	0	29/03/2017	31/03/2017	2 days	None identified
July	WBG	8	5	23/07/2015	27/07/2017	5 Days	None identified
October	WBG	11	1	16/10/2017	24/10/2017	8 days	Norovirus
	WWP CH	11	1	19/10/2017	27/10/2017	8 days	Norovirus
	F5	13	1	18/10/2017	30/10/2017	12days	Norovirus
	F6	11	3	21/10/2017	30/10/2017	9 days	Norovirus
	Ward 27 (bay restriction)	10	1	23/10/2017	31/10/217	8 days	None identified
November	Ward 27	5	2	1/11/2017	08/11/2017	7 days	Rotavirus
	Ward 11	9	0	24/11/2017	02/12/2017	7 days	Rotavirus
December	Ward 21 (bay restriction)	5	0	8/12/2017	13/12/2017	5 days	None identified
December	Westbourne Green	8	2	18/01/18	30/01/18	12 days	Flu A & B
February 18	Ward 22	9	0	2/02/18	13/02/2018	11 days	Flu B

Table 3

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5.2 Increased Incidence in Influenza cases Reported.

- This winter has seen significant rise in cases of influenza with many requiring hospitalisation.
- In week 10 of 2018, there were 281 hospitalised confirmed influenza cases reported from 16 NHS Trusts across England through the USISS sentinel hospital network, with a rate of 4.86 per 100,000 compared to 5.08 per 100,000 in the previous week, this continues to be above the very high impact threshold of 4.20 per 100,000.
- A total of 8,366 hospitalised confirmed influenza have been reported since week 40, 2017 via the sentinel scheme in England.
- The Infection Prevention Team have supported the Trust with daily review of side-room and identified influenza cases; daily reporting of new cases; fit testing training and respiratory precaution training.
- The graph below (figure 7) highlights the number of new cases of confirmed influenza from January 2018, with the peak in cases seen from 17th January 2018.
- A second wave of cases was observed in February 2018 and is most likely associated with the cold weather /snow. Daily reporting continues until April as requested by NHSE.

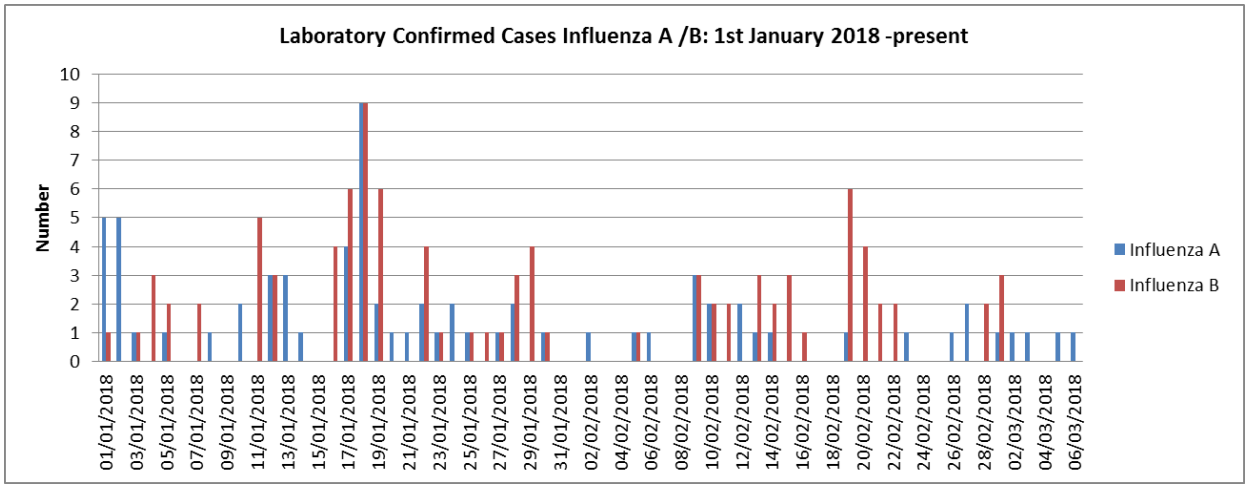


Figure 7

5.3 Inadvertent Potential Exposure of Tuberculosis Investigation

5.3.1 An investigation was carried out in relation to a possible cross transmission of Mycobacterium tuberculosis from a previously confirmed case (Index case- Patient A) to another patient (Patient B).

- Whole-Genome sequencing (WSG) of Mycobacterium tuberculosis clinical isolates from both patients has been confirmed as the same.
- Infectious Diseases Consultant team confirmed that in discussion with Birmingham PHE lab that the statistical chance of the 2 cases not being related was extremely unlikely and therefore a route of transmission continued to require investigation.

- A second isolate from patient B had reported identical WSG to the first isolate therefore no lab error identified.
- This may infer a (yet unidentified) third party, however further contact tracing was required.

5.3.2 Patient A (Index case)**:** Originally diagnosed with Pulmonary TB in November 2016, with completion of empiric treatment in May 2017. On the 26th October 2017, the patient was readmitted into a side room on the medical admissions unit (AMU) and on the 28th October 2017 was transferred to a side room on ward 24 (ID ward). On the 14th November 2017- Discharged Home from ward 24.

5.3.3 Patient B: Has a history of advanced chronic obstructive airways disease, requiring continuous oxygen with marked deterioration in her condition over recent months. In July 2017, the patient's chest x-ray was not suggestive for pulmonary TB. Between July 2017 and April 2018 the patient has been admitted to the Trust on 14 separate occasions to various wards including ward 9, 23, 26 and ward 18.

5.3.4 Initial investigations confirm that although both patients were admitted to ward 24 in November 2017, Patient A had been discharged 2 days prior to Patient B's admission, with both patients residing in different side rooms during their stay.

5.3.5 Further look back to Sept 2017 had identified both patients admitted to MAU; however they were in separate parts of the Unit and in side rooms, therefore transmission episode at this point very unlikely.

5.3.6 A review of the Chest X-rays and clinical symptoms by the Infectious Diseases Consultant team highlighted that Patient B episode of acquisition was likely to have been before July 2017. No link through outpatients' department visits was identified and no multi- patient use equipment identified.

5.3.7 The investigating team therefore concluded, with agreement from PHE and CCG representatives that the definition as 2 confirmed cases of Mycobacterium tuberculosis with the same Whole-Genome Sequencing but with no identified causal link. Staff contact tracing for those with exposure risk have been notified to Occupational Health for review and follow up and any further TB case specimens will continue to be sent for WSG.

5.3.8 Investigation of patient contacts for Patient B during inpatient stay episodes is ongoing by the TB Specialist nurses. This involves screening and risk assessment of any patient contacts and any further patients identified at risk will be discussed at a follow up investigation meeting.

6. Mandatory Training

- The table in appendix 2 highlights the compliance for completion of the infection control annual update.

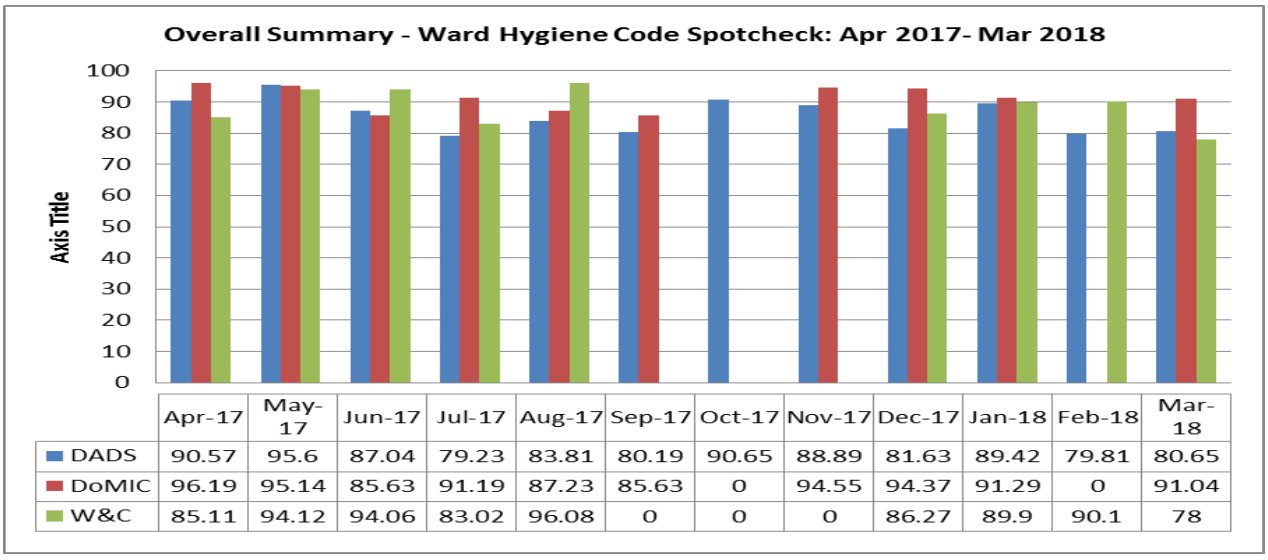
- There has been a 2% increase in compliance during February 2018 with an overall compliance of 72%.
- The Divisional compliance data will be scrutinised further to identify those wards/departments or clinical team who are struggling to access the Mandatory training lectures or the e-learning programme.
- Training boards with assessment component will be developed as part of the annual work programme for 2018/19. These will be identical to the current core skills training but be available at ward/department level on a rotation throughout the Trust.

7. Hygiene Code Spot-check Audit Programme Results

7.1 The annual hygiene code spot check audit programme has completed 90 wards audits and 71 clinical departments during 2017/18. The audit reports compliance with standards of environmental hygiene and in relation to infection prevention policies and national best practice.

7.2 The percentage required to achieve compliance is > 75%. This is in keeping with the Trust cleaning standards and additionally promotes sustained improvement in delivering safe care. Any ward that does not achieve >75% is immediately escalated back to the ward manager, Matron and Divisional Nursing team. An action plan is requested and a re-audit undertaken once actions are confirmed as completed.

7.3 The graphs below highlight the annual average percentage score for wards (Figure 8) and Departments (Figure 9) represented by Division. Significant focus has continued on specific areas of high-risk activity such as commode cleanliness which are regularly audited by the IPN team in addition to the hygiene code audits.



	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18
DADS	90.57	95.6	87.04	79.23	83.81	80.19	90.65	88.89	81.63	89.42	79.81	80.65
DoMIC	96.19	95.14	85.63	91.19	87.23	85.63	0	94.55	94.37	91.29	0	91.04
W&C	85.11	94.12	94.06	83.02	96.08	0	0	0	86.27	89.9	90.1	78

Figure 8

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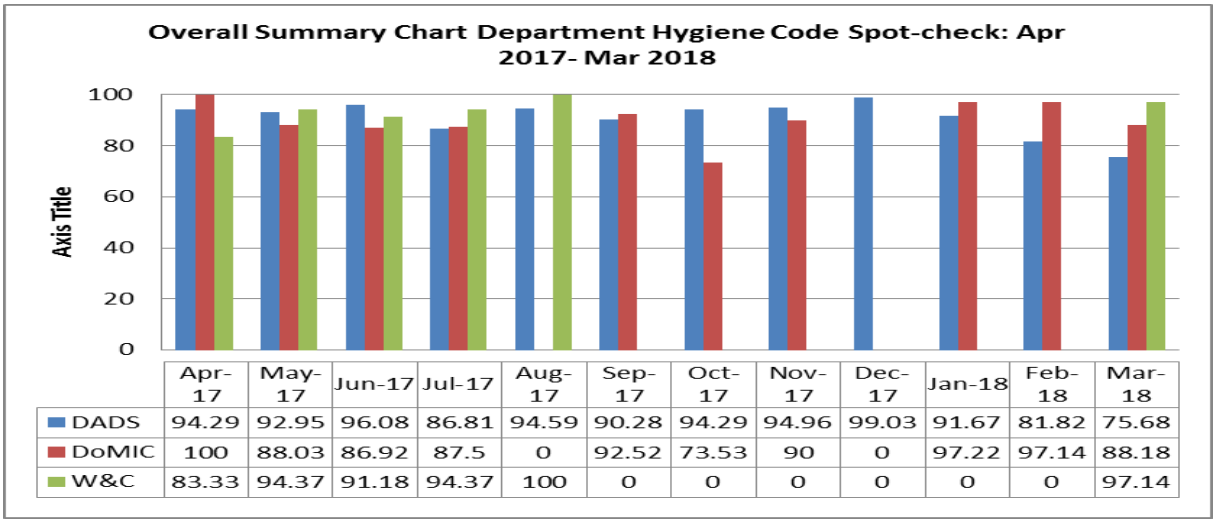

	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18
DADS	94.29	92.95	96.08	86.81	94.59	90.28	94.29	94.96	99.03	91.67	81.82	75.68
DoMIC	100	88.03	86.92	87.5	0	92.52	73.53	90	0	97.22	97.14	88.18
W&C	83.33	94.37	91.18	94.37	100	0	0	0	0	0	0	97.14

Figure 9

7.4 **High Impact Intervention Audit Programme**

- In addition to the hygiene code audits, there is a comprehensive programme for auditing compliance with standards of infection prevention for clinical practice. These are called High Impact Interventions (HII) and are nationally recognised standards of practice.
- The audit results for compliance with the WHO 5 moments of hand hygiene for each Division are reported in Appendix 1.
- The audits identify the maximum and minimum compliance scores per month with the overall average percentage compliance.
- Whilst the overall compliance is exemplary, the graphs highlight pockets where improvements are required. The audit results are monitored and any actions to correct shortfall in compliance are followed up in the Divisional IPC meetings and issues reported to the IPCsC.
- The IPC Nursing team will also undertake spot- check observation audits as part of the annual work programme for 2018/19 and provide support to those staff that require further training.
- Appendix 2 highlights the average compliance for areas of clinical practice which supports infection prevention (High Impact Interventions). The overall Trust compliance average of 92% was reported.
- Women's and Children's Division identified 2 areas of concern in relation to MRSA screening and although these were based on very low audit observation numbers, support has been provided to the division to ensure the familiarity of MRSA screening protocols is in place. The compliance data for MRSA screening has subsequently improved to 100% and an improvement in the number of audits completed up to 94 audits during March 2018. The data for care of renal dialysis is blank for Women's and Children's Division as this audit is not relevant.

7.5 Internal Audit

7.5.1 Internal Audit completed an audit during 2017 with the objective identified to seek assurance that sufficient processes are in place to:

- Ensure there is a consistent and patient focussed procedure in place;
- That all registered nurses (and health care assistants for removal) have had appropriate training and are aware of the guidance and best practice
- Appropriate reporting and document management is in place.

- The report identified areas for improvement and actions to ensure compliance were completed and summarised in table 4 below:

Recommendation	Priority	Actions
1. Review current processes and initiatives to ensure compliance levels with protocols are increased	high	Care plan for IV cannulas/Central Lines are now available on EPR. However, there are currently issues with staff understanding how to access the care plans. This is being actioned with EPR training workshops and development of standard operating procedure for how to access the care plans. This continues to be a priority for the EPR improvement work plans.
2. Senior ward staff to undertake period audits to verify cannulation protocols are being adhered to and documented evidence is available	Medium	Audit data which is collated on a bi-monthly basis from Meridian database, is reported to IPCC.
3. Amend the cannulation insertion template to incorporate a printed name	Medium	Care plans for insertion and ongoing care now available on EPR which can log staff details automatically.
4. Staff booked for attending venepuncture/ cannulation training, should be followed up if do not attend. Competency assessments should be introduced.	Medium	Competency assessment part of venepuncture/ cannulation training. Competency assessment planned for ANTT programme and is part of 2018/19 IPCC work programme.

Table 4

7.5.2 A follow up audit of compliance with MRSA screening protocols was completed during 2017 following and initial internal audit in 2016. The follow up audit action plan was completed and the completed action plan is presented in appendix 4.

8. Decontamination Advisory Sub Group

The Decontamination Advisory Group chaired by the Trust Decontamination Lead and a multi-disciplinary membership and membership including the Trust DIPC, and representatives from service users and stakeholders has continued to meet, reporting to the IPCsC.
The agenda covers issues relating to the B Braun Sterilog Decontamination Contract, Westwood Park (WWP) and Trust decontamination issues. The Decontamination sub group has met quarterly and has reviewed the operational assurance as set out below; reported any associated risks or

incidents, contract issues and KPI monitoring and provided assurance on compliance with relevant legislated or mandated requirements.

8.1 Decontamination and sterilisation services

Decontamination and sterilisation services for Bradford Royal Infirmary (BRI) and St Luke's Hospital (SLH) are provided by the B Braun Sterilog Pudsey facility. This off-site service is part of the National Pathfinder Project in conjunction with the Department of Health and the partner Trusts of Calderdale and Huddersfield and Leeds Teaching Hospitals.

B Braun Sterilog have an agreed set of Infection Control Procedures which mirror those of the collaboration Trusts. Contingency and Disaster Recovery Procedures are reviewed 6 monthly by the Joint Management Board.

8.1.1 Quality Standards

The B Braun Sterilog decontamination facility at Pudsey is a purpose built facility of 4,500 m^2 it is designed and constructed in accordance to Hospital Building Note 13 (NHS Estates). The facility has environmental cleanroom standards of ISO Class 8.

All decontamination processing equipment is compliant with current NHS and European standards for the reprocessing of reusable medical devices. The decontamination facility is audited by British Standards Institute on a 6 months basis for continued compliance with ENISO13485:2003 "Medical Devices Quality Management System requirements for Regulatory Purposes" and Medical Devices Directive MDD 93/42/EEC. The facility continues to pass BSI audits with no major non-conformance identified.

8.2 Westwood Park (WWP) DTC.

Sterile services at Westwood Park are provided by Barnsley Hospital NHS Foundation Trust. This is a long standing historical arrangement dating from a time when the centre was managed by the former PCT. Only small volumes (< 100 items per week) of mainly gynaecological single packed items are reprocessed to a Service Level Agreement which is renewed annually.

8.3 Decontamination of Endoscopes

On the BRI site the central endoscope reprocessing unit continues to provide a hospital wide facility for the compliant decontamination and re-processing of flexible endoscopes. Flexible endoscopes are not used on the SLH site and no facility is available on that site for reprocessing flexible endoscopes.

8.3.1 Compliance:

The BRI unit continues to demonstrate best practice as required by JAG, CQC and HTM guidance; HBN 13, HTM 01-01, and HTM 01-06. The facility passed the annual IHEEM Decontamination Technical Platform review of Flexible Endoscope Decontamination Facilities in April 2018. There is

now recommendation that the dept. be accredited to the Medical device directive, ISO 13485 or ISO 9001 or has plans to work towards these in the future. This may become compulsory in the future. Any implementation of an on-site accredited service would be a major undertaking with significant revenue consequences. The Trusts appointed Authorising Engineer (Decontamination) continues to provide advice and guidance to support the unit with technical and compliance issues.

8.4 **Other occurrences during this period**

a. Hitachi drop in probe is now in for use following the decontamination arrangements agreed with B Braun.
b. NHS premises Assurance Model completed along with Estates department.
c. DGSA (Dangerous Goods Safety Advisor) Audit. Issue has been raised with regards to the storage of chemicals used in the department. The department is currently working closely with the Waste Management lead and DGSA to resolve this issue.
d. Memo alert received from NHSI regarding an incident following inadvertent flushing of cleaning fluid during bronchoscopy procedure at the bedside. The only department carrying out this in the Trust was ICU. Practice for this procedure supported compliance with the alert recommendations, however to provide further assurance an SOP was developed and approved at the ICU Governance and IPCsC.

9. Water Safety Steering group

- The Water Safety Steering Group is responsible for the effective management of all water systems throughout the Trust (and community properties), ensuring collectively that all departments are in compliance with the requirements of Health Technical Memoranda (HTM) 04 – Safe Water in Healthcare Premises.
- The Water Safety Steering Group has continued to meet quarterly and report to the Infection Prevention and Control Committee.
- Screening water samples in augmented care areas (critical care, oncology, haematology and renal) for Pseudomonas aeruginosa has continued. If outlets are found to be contaminated then actions are taken by the Estates department to dismantle and disinfect or replace the outlets and retest. While work is ongoing then the water outlets are filtered to mitigate the risk. Full risk assessments have been updated for all areas.
- Each room in the new ICU has a hand wash basin and a disposal slop hopper with a cold water outlet to clean the sink. The hopper will not be used for hand washing or other purposes.
- Pseudomonas and Legionella risk assessments are updated regularly In excess of 400 outlets are regularly sampled and tested in augmented areas during 2017/18.
- Any positive samples from taps are actioned with filters fitted and flushing programme reinforced. Legionella screening has continued according to the Water Safety plan.

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10. Cleaning Sub Group

10.1 Background

- The operational cleaning policy and procedures outlines the responsibilities of cleaning services as well as the responsibilities of all members of staff to ensure the provision of a clean hospital environment.
- The Cleaning Services Department complete audits in accordance with the national specifications for cleanliness in the NHS: a framework for setting and measuring performance outcomes (2007). Assurance of compliance is provided via monthly reports presented at the monthly Infection Prevention and Control Committee (IPCsC).

10.2 Cleanliness Audit Process and Compliance

- All wards and departments are categorised into one of four risk categories by the Infection Prevention and Control Team which outlines the target score for each category and the frequency of audit to be undertaken.
- Table 5 below provides the quarterly cleanliness audit scores against each of the risk categories and demonstrates cleanliness has been maintained above the target minimum performance score for the reporting period 1 April 2017 to 31 March 2018.

Reporting Period	Very High Risk Target Score 98%	High Risk Target Score 98%	Significant Risk Target Score 95%	Low Risk Target Score 75%
Quarter 1	99.15%	99.10%	97.61%	91.58%
Quarter 2	99.03%	99.22%	98.19%	95.11%
Quarter 3	98.99%	98.72%	95.26%	95.02%
Quarter 4	98.58%	98.73%	96.81%	92.05%

Table 5

- The scores above reflect a total of 749 routine cleanliness audits of which there were 15 failed audits (2%). All failures have action plans in place at the time, until all issues are addressed. In addition those areas are re-audited at an increased frequency until the required standard is achieved and maintained consecutively.

- The top 5 reasons for failure are:

- Build up
- Dust
- Badly cleaned
- Below standard
- Lime scale

- The cleaning management team have revised the cleaning training with a focus on reasons for failures and all staff will be retrained during 2018.

10.3 **Infection cleaning following patient discharge**

- Cleaning services continue to meet high demand to support the clinical teams to maximise patient flow by ensuring a rapid response to infection cleaning requests, following patient discharge.
- In this reporting period the dedicated team completed 10,508 infection cleans compared to 11,110 in the same period 2016/17 (it should be noted that during the implementation of EPR the number of requests for infection cleaning significantly reduced).
- As part of the assurance process Cleaning Supervisors use Adenosine Triphosphate Testing (ATP) to test two infection cleans per week to ensure effective cleaning has taken place. The tests are recorded and reported as part of the monthly presentation to IPCsC.
- The ATP results for the reporting period are 89.41% pass rate, 5.53% caution and 7.35% fail. The cleaning management team have reviewed and enhanced infection clean training and the ATP results are expected to improve reflecting the delivery of this training during 2018.
- The Infection Clean Team provides HPV decontamination of side rooms using a Deprox system, following the discharge of patients where CPE or C-Diff has been identified.

10.4 **Improvements to Service Delivery**

- Since the introduction of EPR last year, all infection clean requests are entered electronically at ward level using the Capacity Management Module. The request goes directly to the infection clean team via a hand held device and has reduced response delays. The reporting element of Capacity Management is a work in progress.
- All ad-hoc cleaning requests are now requested through the Estates Helpline and logged on the ‘Planet’ system and therefore provides an improved audit trail from request to response time.
- A combined focus between Estates, Facilities, Infection Prevention and Control and the Clinical Management Teams in all theatres has improved the overall environment and cleanliness. Continued monitoring is in place.

10.5 **Planned for Next Year**

- A number of trials are planned for early 2018 including:
    - Microfibre mopping, a more efficient way to routinely clean and dry floors, clean spillages and improve the time taken to clean large floor areas.
    - Ultra-V UV-C light and ProXcide HPV Decontamination Systems. Both technologies profess significantly reduced decontamination cycle times, therefore enabling rooms to be released back more quickly to improve patient flow.
- A review of the existing cleaning policy and development of standard operating procedures to replace existing appended procedures is underway.
- A Multi-Disciplinary Sub Group reporting to the IPCsC is currently being agreed between Facilities and the Infection Prevention and Control Team.

11. Procedural Documents Approved

11.1 The following policies and protocols were reviewed and approved at the Infection Prevention and Control Sub Committee meetings during 2017/18:

- Respiratory virus
- Clostridium difficile
- Source & Protective Isolation
- Infection Control
- Staff Blood Borne Virus
- Vascular Access devices
- Sterile Asepsis in the Operating Theatre
- MDR-GNB
    - PAT and Guide Dog
    - Outbreak plan
    - CJD/TSE
    - Indwelling Urinary Catheter
    - Diarrhoea and Vomiting
    - Staff immunisation
    - TB Pre - employment Screening

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Appendix 1 Audit results for Observations of Hand Hygiene: April 2017- March 2018

Division Anaesthesia, Diagnostics and Surgery:

Division Women and Children:

Division Medicine and Integrated Care:

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Appendix 2: Meridian Audit Results for High Impact Interventions – [April – March 18]

Current Data Sources	Area(s) of concern	Score - HII 1a Central Venous Catheter Care Insertion	Score - HII 1b Central Venous Catheter Care	Score - HII 2a Peripheral Intravenous Cannula Insertion	Score - HII 2b Peripheral Intravenous Cannula Care	Score - HII 3a Renal Dialysis Catheter Insertion	Score - HII 3b Renal Dialysis Catheter Care	Score - HII 4 Prevention Surgical Site Infection - Peri Actions	Score - HII 5 Ventilated Patients – Care	Score - HII 6a Urinary Catheter Insertion	Score - HII 6b Urinary Catheter Care	Score - HII 7 Diarrhoea to reduce the risk from C Difficile	Score - High Risk Ward MRSA Screening	Score - Low Risk Ward MRSA Screening	Score - NNU Hand Hygiene
Threshold	-	< 50 < 75 < 100	< 50 < 75 < 100	< 50 < 75 < 100	< 50 < 75 < 100	< 50 < 75 < 100	< 50 < 75 < 100	< 50 < 75 < 100	< 50 < 75 < 100	< 50 < 75 < 100	< 50 < 75 < 100	< 50 < 75 < 100	< 50 < 75 < 100	< 50 < 75 < 100	< 50 < 75 < 100
Area(s) of concern Count	-	(0/3)	(0/3)	(0/3)	(0/3)	(1/3)	(0/3)	(0/3)	(0/3)	(0/3)	(0/3)	(0/3)	(1/3)	(0/3)	(0/3)
Anaesthesia, Diagnostics and Surg	(0/15)	96	92	97	94	95	90	80	100	98	88	88	96	-	-
Medicine & Integrated Care	(0/15)	100	98	98	88	98	93	100	-	99	95	93	92	-	-
Women's & Children's	(2/15)	97	95	94	88		-	94	96	97	95	92	48	75	93

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Appendix 3: Mandatory Training Compliance

Core Mandatory Training Compliance - February 2018		Medicine & Integrated Care	Denominator	Anaesthesia, Diagnostics & Surgery	Denominator	Women & Childrens	Denominator	Pharmacy	Denominator	Core Central Services	Denominator	Estates & Facilities	Denominator	Research	Denominator	Trust Total	% change since previous month
Infection Control	Frequency																
Infection Control Level 1	Once Only	100%	1654	100%	1683	100%	802	100%	145	100%	769	100%	560	100%	129	100%	no change
Infection Control Level 2	1 Year	72%	1233	68%	1135	76%	612	87%	117	72%	121			79%	14	72%	2% increase
Total		87%	2887	87%	2818	89%	1414	95%	262	96%	890	100%	560	96%	143	90%	no change

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Appendix 4: Internal Audit: MRSA screening Action Plan Updated February 2018

Recommendation	Priority / Status	Original action date	Revised action date	Comments	February 2018 Update
All patients identified as high risk to be MRSA screened, as identified in the Policy.	High	31-Aug-17	30-Nov-17	Oct17 - KD - EPR implemented on 24.09.17 with revised questions in relation to MRSA screening. We have also reviewed the high risk and low risk wards at IPC. The plan is to review the compliance data two months post the go-live week of 24.11.17 and report to the IPC thereafter.	The policy was re-issued on July 2017 and January 2018. The Divisions continue to review their compliance data with presentation of results at the monthly Divisional IPC meeting and IPCC. Any areas of non-compliance are highlighted and issues addressed at ward level by the divisional matrons with feedback to Head of Nursing. Audit of high risk admission wards completed February 2018 showing 100% compliance for MRSA screening
Only patients who meet the criteria on low risk wards to be screened, as identified in the Policy.	High	31-Aug-17	30-Nov-17	Oct17 - KD - EPR implemented on 24.09.17 with revised questions in relation to MRSA screening. We have also reviewed the high risk and low risk wards at IPC. The plan is to review the compliance data two months post the go-live week of 24.11.17 and report to the IPC thereafter. Audit of low risk patients completed 2018 showing 100% compliance to MRSA screening protocol	The Divisions continue to review their compliance data with presentation of results at the monthly Divisional IPC meeting and IPCC. The Divisions continue to review their compliance data with presentation of results at the monthly Divisional IPC meeting and IPCC. Any areas of non-compliance are highlighted and issues addressed at ward level by the divisional matrons with feedback to Head of Nursing. Audit of low risk patients completed 2018 showing 100% compliance to MRSA screening protocol

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The MRSA risk assessment in the nursing admission document to be fully completed in all cases to demonstrate completion and the subsequent actions.	Medium	31-Aug-17	30-Nov-17	Oct17 - KD - EPR implemented on 24.09.17 with revised questions in relation to MRSA screening. We have also reviewed the high risk and low risk wards at IPC. The plan is to review the compliance data two months post the go-live week of 24.11.17 and report to the IPC thereafter.	Audit results presented at February 2018 IPCC. Action Complete
The MRSA risk assessment in the nursing admission document to be amended (if still in place following implementation of EPR), to remove the section 'to record the return of a positive result'.	Low	31-Aug-17	30-Nov-17	Oct17 - KD - EPR implemented on 24.09.17 with revised questions in relation to MRSA screening. We have also reviewed the high risk and low risk wards at IPC. The plan is to review the compliance data two months post the go-live week of 24.11.17 and report to the IPC thereafter.	Action Complete
To agree, document, disseminate and implement a suitable process including responsibilities, to ensure the performance and completion of a completed patient IPC Risk Assessment	Medium	31-Aug-17	30-Nov-17	Oct17 - KD - EPR implemented on 24.09.17 with revised questions in relation to MRSA screening. We have also reviewed the high risk and low risk wards at IPC. The plan is to review the compliance data two months post the go-live week of 24.11.17 and report to the IPC thereafter.	Audit review is undertaken at Divisional IPC meetings with any areas of non-compliance highlighted and issues addressed at ward level by the divisional matrons. Audit results showing 80% compliance to full completion of electronic nursing risk assessment. Presented at February 2018 IPCC

including MRSA screening Question 4.					
To agree, document, disseminate and implement a suitable method of recording the completion of a Care Plan where a positive MRSA result is obtained from screening.	Low	31-Aug-17	30-Nov-17	Oct17 - KD - EPR implemented on 24.09.17 with revised questions in relation to MRSA screening. We have also reviewed the high risk and low risk wards at IPC. The plan is to review the compliance data two months post the go-live week of 24.11.17 and report to the IPC thereafter.	The MRSA paper care plan has been superseded with the introduction of EPR. The plan is for the EPR team to incorporate an electronic care plan as part of their next planned implementation phase. The IPC team continue to add MRSA Flag/Alerts to the patients EPR records where applicable, as well as additional comments to support and prompt staff in the correct management of care for this patient cohort.

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Appendix 5: Annual Work Programme: 2018/19

RAYG Key	
R	red behind schedule with significant risk to implementation
A	ongoing with moderate risk to implementation
Y	Ongoing with limited risk to implementation
G	no risk to implementation or complete

Infection Prevention & Control Annual Work plan: 2018 -19					
Criterion 1 – Systems to manage and monitor the prevention and control of infection. These systems use risk assessments and consider how susceptible service users are and any risks that their environment and other users may pose to them					
QS No.	**Standard required**	**Where we are now**	**What we need to do to meet the Standard :Actions for 2018/19**	**R A Y G**	**Timescale & individual responsibility.**
1.1	**Appropriate management and monitoring arrangements should ensure that:**				
1.1.1	A registered provider outlines its collective responsibility for keeping to a minimum the risks of infection and the general means by which it will prevent and control such risks	The Chief Executive and Trust Board of Directors is fully committed to ensuring that the prevention and control of healthcare acquired (HCAI) is afforded a high profile across the organisation and has an outline identifying this responsibility	IPCsC terms of reference, agenda, minutes, action log and committee reports work plan re-formulated to comply with Trust governance templates. Quarterly reports submitted to Patient Safety sub -committee and Quality Committee. The annual report and work programme is submitted to the Quality Committee.	G	Completed April 2018

		There is an Infection Prevention and Control Committee with terms of reference, committee work plan; annual programme of work and an annual report. The IPCsC is a sub group of the Patient Safety committee which is a sub-committee of the Quality committee.			
		Infection Prevention reports are submitted to the Patient Safety and Quality Committees.			
1.1.2	The designation of an individual to be the lead for infection prevention and control and be accountable (i.e. DIPC)	Chief Nurse has responsibility as DIPC, with Nurse Consultant Infection Prevention as Assistant DIPC.	Regular meetings with DIPC and Nurse Consultant Infection Prevention. Quarterly DIPC report provided to the Quality Committee.		Completed and ongoing.
1.1.3	Relevant staff, contractors and other persons, receives training and supervision in, the measures required to prevent and control the risks of infection. there is a record of training and updates for all staff;	Training programme currently covers mandatory infection control and complies with National Core Skills Framework. Record of Mandatory training held centrally, however compliance not monitored by IPCsC routinely.	Monitoring of compliance with Infection prevention mandatory training now reported to IPCsC.		Nurse Consultant completed 1.4.18

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	Education, training and assessment in aseptic technique (ANTT) should be provided to all persons undertaking such procedures.	Current training and assessment for ANTT not mandatory or high priority. To ensure compliance – this needs to be approved as mandatory training or as a minimum 'high priority'. The frequency of re-assessment would need to be agreed	**ANTT Programme:** Implement a programme of training and assessment for ANTT for relevant healthcare professionals. This will be attained using a cascade training system, with 'trained trainers' for each clinical area identified. Training/assessment programme at induction will also be provided.		IPN Team /Education Team 30.12.18
	The principles and practice of prevention of infection (including cleanliness) are included in induction and training programmes for new staff. There is appropriate ongoing education for existing staff (including support staff, volunteers, agency/locum staff and staff employed by contractors), which should incorporate the principles and practice of prevention and control of infection.	Mandatory training and Induction Programme for Infection control is in place and meets National Core Skills Framework.	**Mandatory Training Programme:** Review annual mandatory training programme and implement ward based Board training to support and improve training compliance.		IPN team 1.8.18

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1.1.4	A programme of audit is in place to ensure that key policies and practices are being implemented appropriately	There is an audit programme which covers the DoH High Impact Interventions (HII) for clinical practice; standards of environmental hygiene and fundamentals of infection prevention. These are reported via the Meridian audit system and compliance with these audits is reported to the IPCsC.	**Audit Programme:** Continue to deliver joint IPN & Matron Hygiene code spot-check and Peer review High Impact Intervention (HII) audits as per agreed audit programme. Review training of those nurses undertaking Infection prevention audits and HII's to ensure standardisation of auditing.		IPN team – completed and ongoing
			Spot-checks of HII and hand hygiene and glove usage to be provided by the IPN team, to provide scrutiny from specialist practitioners that audits reflect current practice.		IPN team – completed and report to be submitted to IPCsC 30.7.18
		Nurse Consultant observations of practice highlighted 'key parts' not protected/5 moments hand hygiene not consistent/PPE practices for ANTT not understood.	Implementation of "fundamentals of Infection Control" with emphasis on focussed support to ensure compliance with hand hygiene, use of PPE and standards of cleaning are optimised. Implementation of IPN spot-check audits and rapid feedback process.		IPN Team 30.9.18 Audit completed across BRI – for presentation to IPCsC July 2018. Review of mandatory training for support staff to ensure correct use of PPE in

					progress 30.9.18
		Key themes and summary is reported to the Quality Committee	Audit data to be included in IPCsC reports		Completed April 2018
1.1.5	Designation of a decontamination lead.	There is a Decontamination Lead and a Decontamination group which reports quarterly to the IPCsC There is an annual audit of decontamination services including Endoscopy which is produced by the Authorised Engineer	**Decontamination Programme:** Formal quarterly report from Decontamination group to be implemented as part of the revised terms of reference for the IPCsC and the IPCsC work plan. **Audit plan for 2018/19** Nasendoscope decontamination (ENT OPD); review of risk assessment and operational procedures.2. Pre-cleaning (bedside clean) of endoscopes; all scope types incl. bronch/intubating on ICU.3. Decontamination of TV Probes using Trophon (including validation/testing of Trophon units).4. Decontamination of TOE Probes.5. Manometry catheters (Med Physics)6. Ano-Recto US Probe use and decontamination.(Med Physics).		Decontaminatio n Lead 30.3.19

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1.2.	**Risk assessment - A registered provider should ensure that it has:**				
1.2.1	Made a suitable and sufficient assessment of the risks to the person receiving care with respect to prevention and control of infection and:	Infection Prevention and Control policies in place which outline the risks and steps that are required.	**HCAI improvement programme:** to include Gram Negative Bacteramia improvement programme - (1) hydration awareness and promotion (2) review care of urinary catheters (3) patient hand hygiene QI programme (4) focus on hand hygiene compliance/PPE/ Provide a safe environment/ you are accountable as a “Back to Basics" strategy.		IPN team - commenced May 2018 and run as core work streams throughout the year. Progress reports to be submitted to IPCsC.
		Post Infection Reviews (PIR) are undertaken for MRSA bacteraemia, hospital associated Clostridium difficile.	MRSA PIRs to be completed within 14 working days of notification. CDI PIRs to be completed within 15 working days of notification.		Div. HoN – completed and continuing to be undertaken
		MSSA and E.coli hospital associated bacteraemia are reviewed by the IPN team to support mandatory surveillance requirements and if any lapses in care unidentified, a clinical incident will be submitted.	MSSA and E.coli hospital associated bacteraemia to be reviewed by IPN team as part of enhanced surveillance programme. If lapses in care identified - datix to be reported and investigated by Ward/Divisional team as per normal clinical incident reporting systems.		IPN Team – completed and continuing to be undertaken

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		Summary of lessons learnt and action plans from PIR/RCAs reported to IPCsC.	MRSA and CDI PIR summary with completed action plan to be presented by Divisional Team to the Divisional and Trust IPCsC for the following month committee date.		Div. HoN – completed and continuing to be undertaken
		High incidence/rate of MRSA and MSSA bacteraemia during 2017/18 compared to National average. Need focus on lessons learnt from PIRs and improve care of IV lines and urinary/super-pubic catheters. This needs a focus on hand hygiene, infection prevention fundamental practices and aseptic non touch technique.	Spot-checks of HII and hand hygiene to be provided by the IPN team, to provide scrutiny from specialist practitioners that audits reflect current practice.		IPN Team – completed and continuing
1.3.	**Activities to demonstrate that infection prevention and cleanliness are an integral part of quality assurance should include:**				
1.3.1	Regular presentations from the DIPC to the board. These should include a trend analysis for infections, Cleanliness, antimicrobial resistance and antimicrobial prescribing and compliance with audit programmes;	Antimicrobial stewardship audits have not been completed since June 2017. AMS report not available. This is due to AMS audits not available since summer 2017.	Review of AMS programme and resources to support and Review of AMS group terms of reference and AMS programme of work for 2018/18 with audit programme and quarterly reporting.		Chief Pharmacist /Antimicrobial Pharmacist 30.8.18
1.3.2		Infection Prevention reports to Quality Committee and Patient Safety Committee quarterly. - Unsure if there is a separate cleanliness report.	Need to understand reporting arrangements for cleanliness. Cleaning report submitted to IPCsC bi- monthly and review of Cleaning policy.		Nurse Consultant IPC – completed. Cleaning group

					established with Facilities Manager Policy review in progress – 30.8.18
1.3.3	A review of mandatory and voluntary surveillance data, including antimicrobial resistance (drug-bug combinations), outbreaks and serious incidents;	Comprehensive Surveillance of alert organisms or alert conditions not achievable due to current lack of surveillance data captures systems.	ICNet Infection Control purchased and programme of implementation underway.		Nurse Consultant IPC 31.9.18
		Limited surveillance of mandatory alert organisms only due to current manual data collation and data entry with excel spreadsheet in place which is at risk from transcription error or missed data input.			
		Paper based system for surveillance may lead to errors in reporting therefore lengthy triangulation of data to ensure accuracy, which impacts significantly on IPN time resources and therefore limiting ward based clinically focussed work.			

1.3.4	evidence of appropriate action taken to deal with occurrences of infection including, where applicable, root cause analysis and/or post infection review	PIR action plans are a standing item on the Trust and Div. IPCsC meetings. However, a more robust assurance and accountability process is required for HCAIs where lapses in care have been identified through the PIR process with timescales for completion of PIRs and supporting action plans.	Terms of reference and IPCsC work plan reviewed and revised to provide timeframe for reporting to IPCsC.		Nurse Consultant IPC
		In addition, key themes from PIRs should be included in Board reports and action plans to support lessons learnt established.	Key themes from PIRs now included in Board reports and action plans to support lessons learnt reviewed at IPCsC as standing agenda item.		31.5.18
			Timescales for completion of PIR/RCAs needs clarification with Governance team.		
1.4.	**The infection prevention including cleanliness annual programme should :**				
1.4.1	Set objectives that meet the needs of the organisation and ensure the safety of service users, health care workers and the public; • identify priorities for action;	Annual programme is in place, but needs to reflect the gaps in assurance/compliance as identified in this gap analysis.	Updated annual work programme developed to include Gap analysis findings and to be approved at May IPCsC.		Nurse Consultant IPC/ IPC team 31.5.18

	• provide evidence that relevant policies have been implemented; • report progress against the objectives of the programme in the DIPC's annual report				
1.5.	**An infection prevention infrastructure should encompass:**				
1.5.1	Mechanisms are in place to ensure that sufficient resources are available to secure the effective prevention and control of infection. These should include infection prevention and control infrastructure and the ability to detect and report infections	Infection Prevention Nursing Team with recognised qualifications, knowledge and experience is in place.	Recruitment underway for Consultant Microbiologist posts.		DIPC/Medical Director
	An infection prevention team consisting of an appropriate mix of both nursing and consultant medical expertise (with specialist training in infection prevention and cleanliness),				
	Appropriate administrative and analytical support,	No substantive Consultant Microbiologist –however locum service in place.			

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	Estates and facilities management				
	adequate information technology	ICD – Not established through ID Consultants. Protected PAs not established in work plan and specialist training for ID Consultants in Infection Control specialist areas uncertain (e.g. decontamination, water safety, ventilation, cleaning, food safety, asepsis national guidance or legislation)??			
	a multidisciplinary antimicrobial stewardship committee to develop and implement the organisation's Antimicrobial stewardship programme drawing on Start Smart Then Focus;	AMS committee not in place. Refer to 3.1			
	24-hour access to a nominated qualified infection control doctor (ICD) or consultant in health protection/ communicable disease control. including :	Whilst ID Consultants provide Microbiology support and are available for advice – this is limited due to clinical commitments and ICD not identified in protected PAs.			

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		IPT admin/data analytics currently not available – at present analytics and mandatory surveillance data entry provided by IPN team. This means that nursing time currently spent on data administration is impacting on ward/clinical based specialist support.	Recruitment underway for IP admin post.		Lead Nurse IPC 30.7.18
1.6.	**Movement of service users**				
1.6.1	There should be evidence of joint working between IPT; those managing bed allocation; care staff and domestic staff in planning service user referrals, admissions, transfers, discharges and movements between departments; and within and between health and adult social care facilities.	IPN attends morning bed meeting daily.	Need to work with Informatics team to provide reports from EPR on side room occupancy across the BRI site and those occupied with infections.		Nurse Consultant IPC 30.10. 2018
		Daily support for Clinical Site Team and review of side rooms, however this is impacting on the IPN capacity to support Clinical teams with improvements in infection prevention fundamental practices.			
		The request to review all side rooms including those not being used for isolation is a daily pressure.	Prevalence audit of sideroom usage completed in May and June 2018 with report to be submitted to IPCsC and shared with Site Team.		
1.6.2	Provides suitable and	Alert flagging system in place on EPR	Review GP summary letters process to ensure		Lead Nurse

	sufficient information on a service user's infection status · Movement of patients between wards/department · moved from the care of one organisation to another	Discharge referral letter to GPs provided by IPN team – need to review and ensure the normal process for GP discharge letters includes HCAI information.	HCAI information included.		IPC 30.4. 2018
Criterion 2 : Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections					
Standard required		**Where we are now**	**What we need to do to meet the Standard Actions for 2018/19**	**R A Y G**	**Timescale & individual responsibility.**
2.1	Designated leads for environmental cleaning and decontamination of equipment	Cleaning reports submitted to IPCsC - No formal Cleaning committee with terms of reference.	Cleaning Committee (sub-group of IPCsC) to be reinstated with terms of reference and monthly reports to IPCsC.		Assistant General Manager Facilities 30.6.18
	• in healthcare, the Lead for cleaning involves Heads of nursing, matrons and the IPT in all aspects of cleaning services, from contract negotiation and service planning to delivery at ward and clinical level.	Cleaning audits are provided to Matrons and HON.	Matrons to be invited to Cleaning sub - group.		Assistant General Manager Facilities 30.6.18

	• in healthcare, matrons have personal responsibility and accountability for maintaining a safe and clean care environment;	Hygiene audits completed with IPT and Matrons.	Hygiene audit programme continues with data reported on Meridian and compliance monitored through the IPCsC.		Nurse Consultant IPC completed and ongoing.
	• the nurse or other person in charge of any patient area has direct responsibility for ensuring that cleanliness standards are maintained throughout that shift;	Joint audit programme is in place with IPT and Matrons for infection prevention and cleanliness – these are reported via Meridian, with action plans to support areas of non-compliance.	Action plans where non-compliance identified to be reported through Divisional IPCsC routes		Div. HoN. Completed and ongoing
	• all parts of the premises from which it provides care are suitable for the purpose, kept clean and maintained in good physical repair and condition;	Senior review spot-checks of standards of cleanliness required to ensure systems of assurance in place. Review required of Trust–wide facilities which are relevant to HTM 03 01 Specialised ventilation for healthcare premises. Governance arrangements for assurance processes to support ventilation validation reports and escalation processes are needed to ensure patient safety.	Senior IPN/ Facilities cleaning spot-checks to be implemented monthly **Ventilation** Review of Trust–wide facilities which are relevant to HTM 03 01 Specialised ventilation for healthcare premises, to assess ventilation is fit for purpose, maintained and validated as per HTM requirements. Any areas where ventilation does not meet HTM standards to be escalated promptly through Divisional/Directorate Leads – process for this to be developed through revision of the ventilation policy. Ventilation Working Group TOR to be revised to support assurance processes for HTM 03 01		Assistant General Manager Facilities 30.6.18 Assistant Director Estates 30.8.17

			and provide robust governance systems through the IPCsC and Patient Safety Sub Committee. **Water Safety:** Water Safety Steering group TOR to be revised to support assurance processes for HTM 04 01: Safe water in healthcare premises, and provide robust governance systems through a formal quarterly report to the IPCsC and subsequently the Patient Safety Sub Committee.		Nurse Consultant IP&C/ Assistant Director Estates 30.7.17
	• the cleaning arrangements detail the standards of cleanliness required in each part of its premises and that a schedule of cleaning responsibility and frequency is available on request;	Cleaning policy is out of date and does not reflect The Health and Social Care Act 2008 Code of Practice on the prevention and control of infections and related guidance or PAS 5748.	Review of cleaning policy to be undertaken		General Manager Facilities/Nurse Consultant IPC: 30.7.18
	• there is adequate provision of suitable hand washing facilities and antimicrobial hand rubs where appropriate;	Hand wash facilities are available in all patients and clinical areas, but need review to ensure sink to bed ratio is appropriate and sinks at ward entrances is factored into any new builds or refurbishments. Alcohol gel is available at patient bed area; however wall mounted dispensers at ward entrances lack signage in many areas	Sink to bed ratio review to be completed. Update of signage of alcohol gel at ward/department entrances to be implemented.		IPN Team 30.10.18

	• there are effective arrangements for the appropriate cleaning of equipment that is used at the point of care, for example hoists, beds and commodes – these should be incorporated within appropriate cleaning, disinfection and decontamination policies; and	No routine cleaning spot-checks with IPT/HoN.	Senior walk rounds with Nurse Consultant and Divisional HoN to take place regularly throughout year.		Nurse Consultant IPC/Div. HoN completed and ongoing
	the storage, supply and provision of linen and laundry are appropriate for the level and type of care	Storage of linen often left on corridors and not properly covered	Improve removal of linen from corridors and review covers for linen transport.		Assistant General Manager Facilities 30.6.18
2.2	Policies on the environment should take account of infection prevention team expert advice : cleaning services; • building and refurbishment, including air-handling systems; • waste management; • laundry arrangements for the correct classification and sorting of used and infected linen;	Estates and Facilities policies in place.	Continue Programme of policy review where review date is due for expiry or where new national guidance, best practice, lessons learnt from RCAs requires a policy development/review. Review of Ventilation policy to reflect Trust – wide remit in progress and to be approved at IPCsC July 2018		Assistant Director Estates Nurse Consultant IP&C 30.6.18

	• planned preventative maintenance; • pest control; • management of drinkable and non-drinkable water supplies; • minimising the risk of Legionella and other water supply and building related infections (e.g. Pseudomonas aeruginosa and aspergillus) • food services, including food hygiene and food brought in by service users, staff and visitors				
Criterion 3 : Ensure appropriate antimicrobial use to optimise patient outcomes and to reduce the risk of adverse events and antimicrobial resistance					
Standard required	**Where we are now**	**What we need to do to meet the Standard**	**R A Y G**	**Timescale & individual responsibility.**	

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3.1	An antibiotic stewardship committee responsible for developing, implementing and monitoring the organisation's stewardship programme.	The Trust has an Antimicrobial Prescribing Review Group (APRG) which currently reports to Drug and therapeutics committee.	**Antimicrobial Stewardship Programme:** Review antimicrobial prescribing policy and amend TOR where necessary to make stewardship a key responsibility of this group		? Dr Rahama +/- Pharmacy support (AJH) 30.7.18
		Audit is always on the agenda			
		Terms of reference do not currently explicitly use the terms antimicrobial stewardship. These TOR are more specifically about development of protocols and guidelines, although they include reference to monitoring prescribing			
	The IPCsC committee should report antimicrobial stewardship activities to the Trust Board via the organisation's Director of Infection Prevention and Control or equivalent.	Nothing currently reported beyond monthly prescribing compliance audits	Stewardship program to be drafted -		Lead pharmacist antimicrobial therapy - Schedule to be restarted from 1 8 18
			Next meeting is 16th May – could have amended TOR drafted by then to include stewardship responsibilities to be approved by DTC (or IPCsC if more appropriate.		
		The Lead pharmacist (Antimicrobial therapy) reported audit results to IPCsC monthly up until EPR go-live	Audit schedule to be agreed and developed		

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		Audit program to be re-introduced now EPR is embedded			
	Adherence to prescribing policy and compliance with post-prescribing review at 48-72 hours should be audited on a regular basis, with data fed back to prescribers and incorporated into patient safety reporting systems to Boards	Nothing currently reported beyond monthly prescribing compliance audit	Lead Pharmacist antimicrobial therapy to compile draft stewardship program for approval To be presented to IPCsC at July's meeting OR for approval at APRG meeting		Lead pharmacist antimicrobial therapy - Schedule to be restarted from 30 7 18
3.2	Providers should have access to timely microbiological diagnosis, susceptibility testing and reporting of results, preferably within 48 hours	Delays in MRSA screening and other microbiology results recently highlighted as an average of 4 days to results reported.	Review of MRSA screening results undertaken and release of provisional results agreed to provide a more timely indication of MRSA results.		Nurse Consultant IPC 30.6. 2018 completed
3.3	Report local antimicrobial susceptibility data (drug-bug combinations) and information on antimicrobial consumption to the national surveillance body. Surveillance information	This data regarding susceptibility data is likely to be reported by the pathology labs (the Joint Venture Service now) directly to the microbiologists/ID consultants for reporting to the National Surveillance body (not confirmed)	Confirm with microbiologists/ID team that susceptibility data is shared with surveillance body		Chief Pharmacist/Antimicrobial Pharmacist 31.5. 2018 completed

	should be used by the stewardship committee to monitor local resistance patterns and guide local prescribing policy.	Consumption data is reported quarterly to PHE as part of a CQUIN	(see Criterion 3.1)		
		Local surveillance information is used by .APRG when prescribing protocols are updates.			
		Resistance patterns are not discussed explicitly however the ID/micro team use their current knowledge to inform as guidelines are updated	No additional action data is reported. No Action needed- information already used appropriately		ID/Microbiology Team & Antimicrobial Management Group 30.7.18
		AMS audits currently not available and AMS report to IPCsC not available.	Review terms of reference for AMS group and resources to support AMS audits/reports to IPCsC		
Criterion 4 : Provide suitable accurate information on infections to service users, their visitors and any person concerned with providing further support or nursing/medical care in a timely fashion					
Standard required		**Where we are now**	**What we need to do to meet the Standard**	**R A Y G**	**Timescale & individual responsibility.**

4.1	Areas relevant to the provision of information include: • general principles on the prevention of infection • the roles and responsibilities of carers, relatives and advocates in prevention of infection, • the importance of appropriate use of antimicrobials; • compliance by visitors with hand hygiene; • policy on visiting; • reporting concerns relating to hygiene and cleanliness including hand hygiene; • explanations of incident/outbreak management	Patient information leaflets are available on the Trust external webpage including: Reducing risk of Infection, MRSA and Clostridium difficile. No specific patient hand hygiene leaflet available, however infection prevention guidance for patients and visitors is in the Bedside folder.	Develop a specific patient hand hygiene leaflet and implement patient hand hygiene QI programme Develop and implement display of HCAI data on each ward including E Coli and MRSA bacteraemia and C. difficile. – will require implementation of ICNet to complete this.		IPN Team 30.11.18
Criterion 5 : Ensure prompt identification of people who have or are at risk of developing an infection so that they receive timely and appropriate treatment to reduce the risk of transmitting infection to other people					
Standard required		**Where we are now**	**What we need to do to meet the Standard**	**R A Y**	**Timescale & individual responsibility.**

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5.1	Ensure that advice is received from IP practitioners and should inform their local health protection team of any outbreaks or serious incidents relating to infection in a timely manner.	Outbreak policy in place.	Outbreak policy in place – to be reviewed to ensure EPRR resilience in place and ensure policy corresponds to West Yorkshire outbreak plans. To work with EPRR office.		Nurse Consultant 30.12.18
	Arrangements should demonstrate that responsibility for infection prevention is effectively devolved to all groups in the organisation involved in delivering care.	PHE represented on IPCsC. Infection Control Policy provides roles and responsibilities outlined for all healthcare staff. Outbreak and SI reports submitted to IPCsC.			

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.

Standard required	**Where we are now**	**What we need to do to meet the Standard**	**R** A Y G	**Timescale & individual responsibility.**

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6.1	Ensure that staff, contractors and others involved in the provision of care co-operate, to meet its obligations under the Code.	Induction programme includes infection control	Induction programme in place. Review of content planned to ensure focus and reflection of National Core Skills Framework and remit of annual work plan (i.e. ANTT).		IPN team 30.2.19
	Infection prevention to be included in the job descriptions and induction programme and staff updates of all employees (including volunteers). Contractors to be aware of issues with regard to infection prevention and obtain 'permission to work'.	Job descriptions include responsibilities for infection prevention and control. Contractors receive a training package from Estates Team.			
Criterion 7: Provide or secure adequate isolation facilities					
Standard required		**Where we are now**	**What we need to do to meet the Standard**	**R A Y G**	**Timescale & individual responsibility.**

7.1	Provide, or secure the provision of, adequate isolation facilities, as appropriate, sufficient to prevent or minimise the spread of infection.	Limited isolation facilities – need to understand what % beds are side rooms	Prevalence of side room usage completed.		IPN team/Nurse Consultant IPC
	Policies should be in place for the allocation of patients to isolation facilities, based on a local risk assessment. The assessment could include consideration of the need for special ventilated isolation facilities. Sufficient staff should be available to care for the service users safely.		Policy for Isolation in place		
7.2	Provide isolation facilities to physically separate service user from other residents to minimise the spread of infection.	Priority protocol for isolation side rooms is in place using RAG rating. However EPR Isolation request not used therefore Clinical site team do not have up to date information on patients requiring isolation on EPR.	Review risk register for risk associated with side room availability.		Nurse Consultant 31.12. 2018
			Work with EPR Team to implement Isolation request and ensure robust audit to support compliance. Provide solution to prevent "isolation" task being completed.		EPR/IPN Team 30.10.18
		Need to understand what % side rooms are used for isolation – prevalence study	Prevalence audit of side room usage completed. Re- audit in May.		Completed
Criterion 8: Secure adequate access to laboratory support as appropriate					
Standard required		**Where we are now**	**What we need to do to meet the Standard**	**R A**	**Timescale & individual**

				Y **G**	**responsibility.**
8.1	ensure that laboratories that are used to provide a microbiology service, in connection with arrangements for infection prevention (including cleanliness), have in place appropriate protocols. These laboratories should operate according to the standards required by the relevant national accreditation bodies.	MRSA screening taking on average 4 days to report with some taking up to 10 days(incident reported on Datix)	Provisional MRSA screen results to commence – IPN team will support comms and educating clinical teams about what this result means.		ID/Microbiology team with support from Nurse Consultant IPC- completed
8.2	Protocols should include: a microbiology laboratory policy for investigation and surveillance of antimicrobial resistance and HCAIs; standard laboratory operating procedures for the examination of specimens1; timely reporting	Transcription errors with Microbiology reports – wrong organism/wrong patient (reported on Datix) Lab protocols held by Airedale laboratories – unsure of compliance	Meetings with Airedale Microbiology service requested.		30.7.18
Criterion 9: Have and adhere to policies, designed for the individual's care and provider organisations					
Standard required		**Where we are now**	**What we need to do to meet the Standard**	**R** **A** **Y** **G**	**Timescale & individual responsibility.**

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9.1	*1. Standard infection prevention and control precautions* *2. Aseptic technique* *3. Safe handling and disposal of sharps* *4. Isolation and Isolation facilities* *5. Outbreaks and Closure of rooms, wards, departments and premises to new admissions* *6. Prevention of occupational exposure to blood-borne viruses (BBVs) including prevention of sharps injuries* *7. Management of occupational exposure to BBVs and post-exposure prophylaxis* *8. Disinfection and Decontamination of reusable medical devices* 9. *Antimicrobial prescribing* *10.Reporting of infection to Public Health England or local authority and*	All relevant policies have regular review and revision programme with ratification at IPCsC and are available on the Trust Intranet MRSA policy under review and needs review of screening protocols.	Continue Programme of policy review where review date is due for expiry or where new national guidance, best practice, lessons learnt from RCAs requires a policy development/review.		Nurse Consultant/ IPN team

	mandatory including Health Protection (Notification) Regulations 2010 *11. Control of HCAIs- specifically MRSA, CDI, GRE, CPE, VHF, CJD, TB, Respiratory viruses, Diarrhoeal infections* *12. Safe handling and disposal of waste* *13. Packaging, handling and delivery or laboratory specimens* *14. Care of deceased persons* *15. Use and care of invasive devices* *16. Purchase, cleaning, decontamination, maintenance and disposal of equipment* *17. Surveillance and data collection* *18. Dissemination of information* *19. Uniform and dress code* 20. *Immunisation of service users*				
Criterion 10: Providers have a system in place to manage the occupational health needs and obligations of staff in relation to infection					

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Standard required		**Where we are now**	**What we need to do to meet the Standard**	R A Y G	**Timescale & individual responsibility.**
10.1	All staff can access occupational health services;	Policies are in place and receive regular review.	occupational health policies on the prevention and management of communicable infections in care workers are in place;		Occupational Health Manager – update of staff MMR imms in progress. 30.11.18
		Staff Immunisation programme is in place and exceptions reported to IPCsC (i.e. shortages of vaccine).	Decisions on offering immunisation are made on a local risk assessment as described 'The Green Book'.		
			vaccines are available free of charge to employees if a risk assessment indicates that it is needed (COSHH Regulations 2002);		
			there is a record of relevant immunisations;		