

## Infection Prevention & Control & Cleanliness Annual Report 2016/17

### 1. The Main Report

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#### 1.1. Introduction

The Director of Infection Prevention and Control (DIPC) is required to produce an Annual Report on the state of Healthcare Associated Infection (HCAI) in the organisation for which she is responsible and release it publicly according to the Code of Practice on the prevention and control of infections and related guidance (The Health and Social Care Act 2008). The Annual Report is produced for the Chief Executive and Trust Board of Directors and describes the activity of the Infection Prevention and Control Team (IPCT) during the year, including progress made against the work plan and targets identified in the Infection Prevention and Control Annual Programme. It also includes Divisional performance against key areas in Infection Prevention & Control. Ward specific audits are reported on a monthly basis through Trust wide key performance indicators (KPI's) and are displayed on public STAR boards.

#### 1.2. Health & Social Care Act Code of Practice

The Robert Jones & Agnes Hunt Orthopaedic Hospital has registered with the Care Quality Commission and have acknowledged full compliance with the Health and Social Care Act (2008) Code of Practice (commonly known as the Hygiene Code).

Compliance criterion	What the registered provider will need to demonstrate
1	Systems to manage and monitor the prevention and control of infection. These systems use risk assessments and consider the susceptibility of service users and any risks that their environment and other users may pose to them.
2	Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections.
3	Ensure appropriate antimicrobial use to optimise patient outcomes and to reduce the risk of adverse events and antimicrobial resistance.
4	Provide suitable accurate information on infections to service users, their visitors and any person concerned with providing further support or nursing/ medical care in a timely fashion.
5	Ensure prompt identification of people who have or are at risk of developing an infection so that they receive timely and appropriate treatment to reduce the risk of transmitting infection to other people.
6	Systems to ensure that all care workers (including contractors and volunteers) are aware of and discharge their responsibilities in the process of preventing and controlling infection.
7	Provide or secure adequate isolation facilities.
8	Secure adequate access to laboratory support as appropriate.
9	Have and adhere to policies, designed for the individual's care and provider organisations that will help to prevent and control infections.
10	Providers have a system in place to manage the occupational health needs and obligations of staff in relation to infection.

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### 1.2.1. Criterion 1 a): Systems to manage and monitor the prevention and control of infection.

#### IPC Structure

The **Chief Executive Officer** has overall accountability for the control of infection at RJAH.

The **Director of Infection Prevention & Control** is the Executive Lead for the IPC service, and oversees the implementation of the IPC programme of work through her role as Chair of the Trust Infection Prevention and Control and Cleanliness Committee (IPCC). The DIPC approves the Annual IPC report and releases it publicly. She reports directly to the Chief Executive and the board on IPC matters. The DIPC has the authority to challenge inappropriate practice.

The **Infection Control Doctor (ICD)** is the Clinical Lead for the IPC service and is contracted for 3 sessions a week to include the microbiology ward round and microbiological reporting. The role includes:

- Advising and supporting the DIPC
- Oversees local IPC policies and their implementation by ensuring that adequate laboratory support is in place
- Attends the Water Safety Group and Decontamination Group
- Chairs the Trust Antimicrobial Stewardship Committee
- Provides expert clinical advice on infection management
- Has the authority to challenge inappropriate practice including inappropriate antibiotic prescribing decisions

The ICD reports to the DIPC on IPC matters.

#### The **Infection Prevention and Control Team (IPCT)**

The Infection Prevention and Control Team (IPCT) are the medical and nursing infection prevention and control specialists responsible for carrying out the work described in the infection control programme of work.

RJAH Orthopaedic Hospital NHS Foundation Trust (RJAH) IPCT currently consists of:

- Consultant Microbiologist: 24h infection control advice is available from the on-call consultant microbiologist
- Infection Prevention and Control (IP&C) Clinical Nurse: (1 WTE) Band 7
- Surgical Site Surveillance Nurse (0.8 WTE): Band 5
- Infection Control Analyst (0.6 WTE): Band 4

The **Antimicrobial Pharmacist**: The Trust employs 0.5 WTE Antimicrobial Pharmacist who works closely with the ICD and other members of the IPC team. There is robust management of antimicrobial stewardship throughout the Trust. The role of the antimicrobial pharmacist includes:

- Attending and contributing to the Trust Infection Prevention & Control Committee meetings and the Antimicrobial Stewardship Committee meetings
- Supporting antimicrobial stewardship initiatives
- Participating in and contributing to the ward rounds with the ICD
- Carrying out audits in line with national guidance
- Providing training regarding antimicrobial stewardship to clinical staff within the Trust

#### Infection Prevention Control Committee

## Infection Prevention & Control & Cleanliness Annual Report 2016/17

The RJAH Infection Prevention & Control Committee (IPCC) is a multidisciplinary Trust committee with outside representation from Public Health England and the CCG. The IPCC oversees the activity of the IPCT and supervises the implementation of the infection control programme of work. The IPCC met every 3 months during 2016/17.

### Attendance at ICC

	<i>April</i>	<i>July</i>	<i>October</i>	<i>January</i>
<b>DIPC</b>	✓	✓	APOL	✓
<b>ICD</b>	✓	✓	✓	✓
<b>IPCN</b>	✓	✓	✓	✓
<b>Ass. DON</b>	✓	✓	✓	✓
<b>SSSN</b>	APOL	APOL		
<b>CCDC (PHE Rep)</b>	APOL	APOL		
<b>Antimicrobial Pharmacist</b>	✓	✓		✓
<b>Facilities Manager (Estates &amp; Facilities Representation)</b>	✓	✓	✓	✓
<b>Matron (Quality &amp; Safety)</b>	APOL	✓		
<b>Matron (Medicine)</b>	APOL	✓	✓	✓
<b>Matron (Surgery)</b>	✓	APOL	APOL	APOL
<b>Matron (Theatre &amp; OPD)</b>	✓	APOL	✓	✓
<b>Theatre Manager</b>	✓	✓	✓	
<b>H&amp;S Officer</b>	✓	APOL		
<b>Head of IPC SCCG &amp; TWCCG</b>	✓	APOL	✓	✓
<b>Clinician Rep</b>		✓	APOL	
<b>TSSU Rep</b>	✓	✓		✓

### The IPC Programme of Work

The IPC programme of work 2015 - 18 was specifically designed to focus on achieving full compliance with the standards identified in the Code of Practice, and the achievement of National and local infection related targets, using a template set by the Shropshire & Telford & Wrekin IPC Lead – the Trust is currently on target to achieve the standards identified.

### IPC Link Practitioner System

The Infection Control Link Practitioner Programme was reviewed and restructured during 2015/16. The group meets bi-monthly, with 'e-updates' being sent out alternately. This has been used as a tool for improving communication to the wider ward/departmental teams.

Topics of discussion for 2016-17 have included:

- Surgical Site Infection
- Skin Preparation
- Hand Hygiene Competency
- Sharps Safety
- Outbreak Reports
- Winter Virus Preparations

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- One Together
- Updates on IPC issues: MRSA, MSSA
- Audit requirements

### 1.2.2. Criterion 1 b): Monitoring the prevention and control of infection

#### Mandatory Surveillance

##### Blood Stream Infection

- MRSA  
 There were 0 cases of MRSA bacteraemia at RJAH in 2016-17. The target remains at 0 MRSA bacteraemia, any case attributed to RJAH would be considered a never event for the Trust.
- MSSA  
 There was 1 case of MSSA bacteraemia attributed to RJAH in 2016-17. The root cause analysis identified that this was a device related bacteraemia.
- E. coli  
 There were 4 cases of E.coli bacteraemia in 2016 -17. All cases related to urinary tract infections.
- C difficile  
 There were 0 cases of C difficile at RJAH in 2016 -17, against a target set at 2 cases.

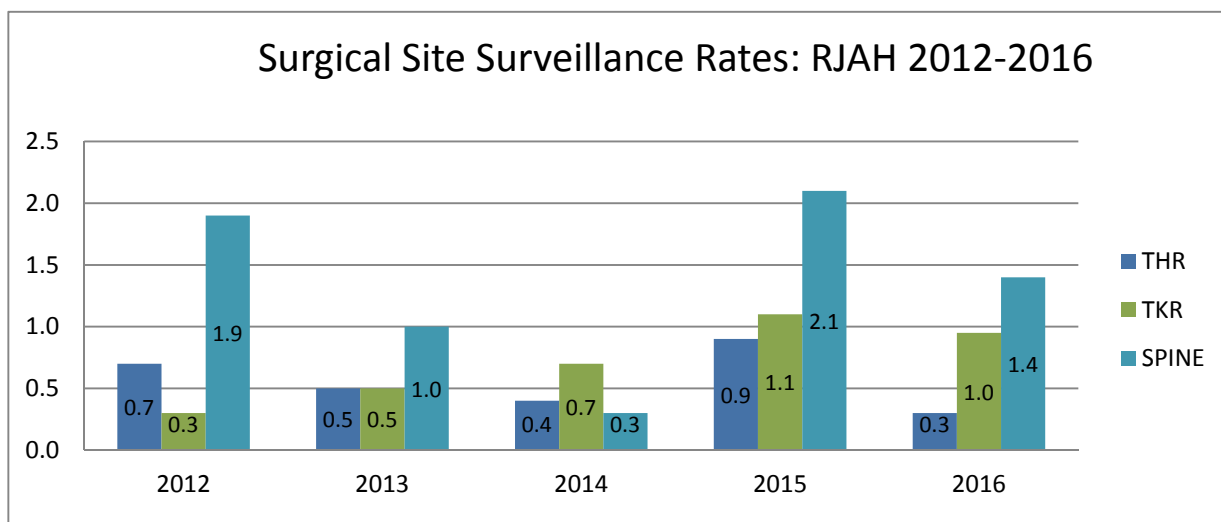
#### Surgical Site Surveillance

Since July 2008, hospitals are required to have systems in place to identify patients who are included in the surveillance and later develop a surgical site infection.

From January 2016 – December 2016, data on 3430 operations – total hip, total knee and spinal surgery was collected by the RJAH surgical site surveillance team

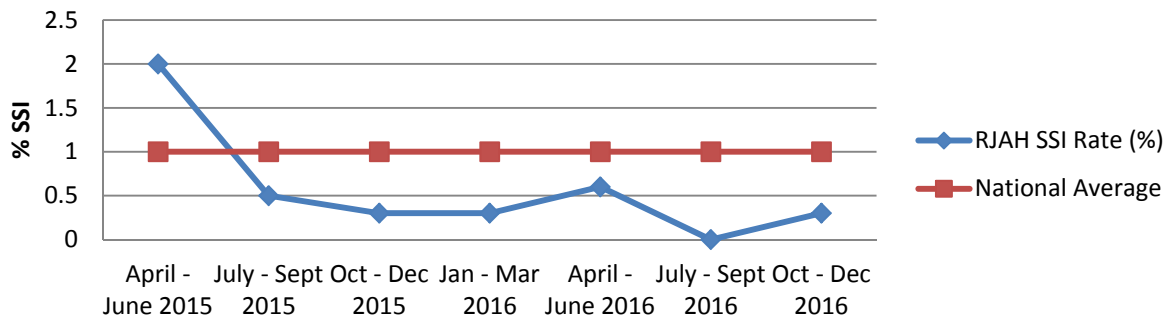
PHE analyses the submitted data at quarterly intervals to identify hospitals whose SSI incidence falls above the 90th or below the 10th percentiles nationally for a given surgical category, enabling the Trust to benchmark itself against the national rate of infection.

Surgeon specific data allows the surgical site surveillance team to provide analysis of infection rates to individual surgeons as part of their validation and appraisal process.

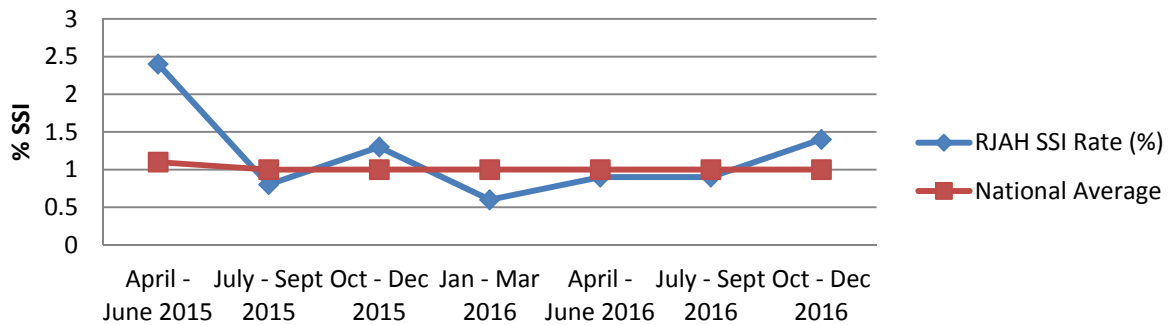


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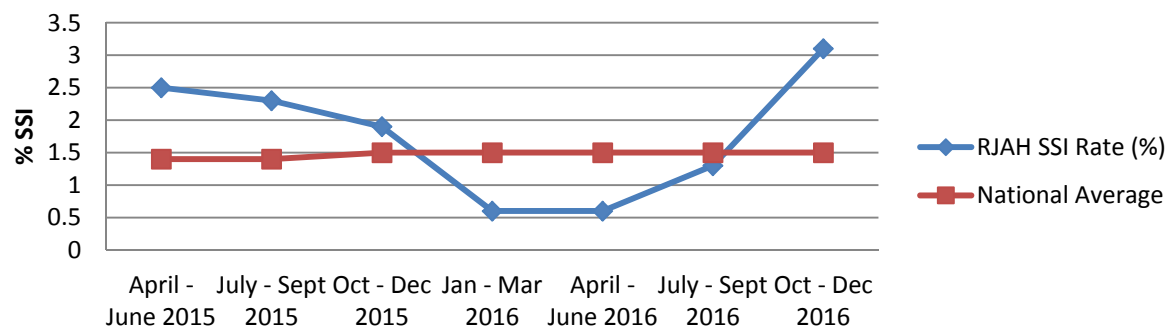
**Surgical Site Surveillance: Total Hip Replacements**



**Surgical Site Surveillance: Total Knee Replacements**



**Surgical Site Surveillance: Spines**



The graphs above demonstrate that hip and knee replacements infections have reduced following the peak in 2015 and remain in line with the national average. Spinal infections were steadily reducing; however there has been a rise in infections in quarter 3. This rise generated an outlier letter from Public Health England which has been shared with the spinal surgeons. Close monitoring of practices alongside a thorough review of all cases is being implemented.

## Infection Prevention & Control & Cleanliness Annual Report 2016/17 Audit

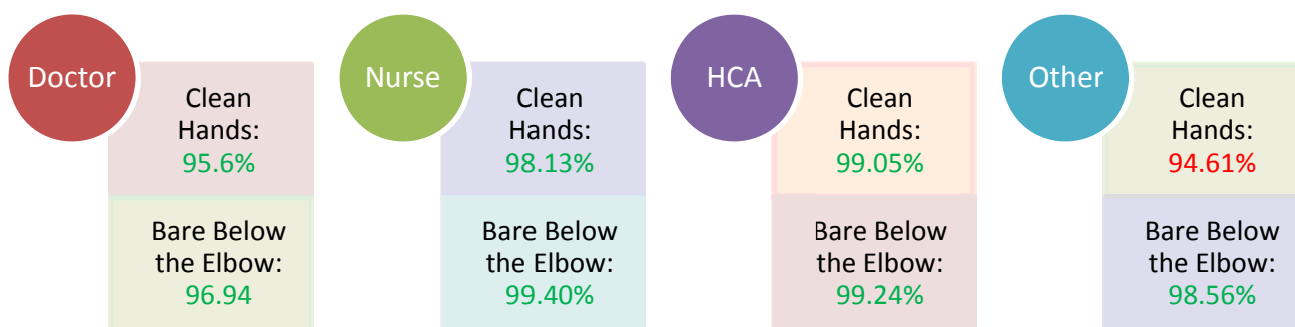
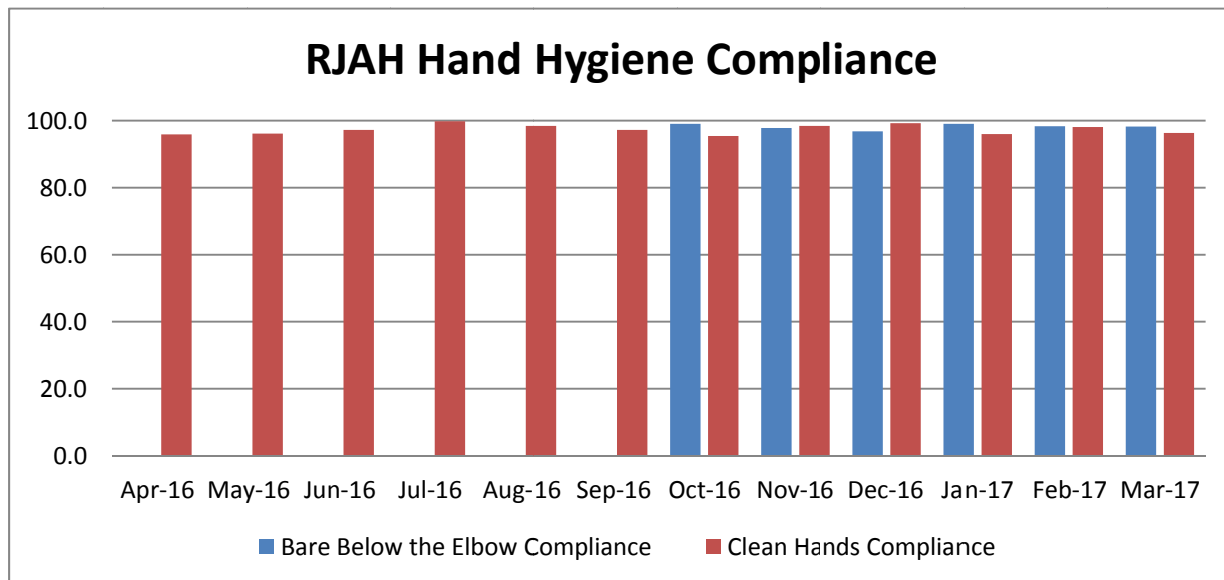
Wards and departments complete a robust package of infection prevention and control audits across the year. In October 2016, the Trust introduced a new toolkit of environmental auditing, which was developed in line with the STAR programme of quality assurance. The tool creates a snapshot of entire ward environment on a monthly basis, and highlights patterns of non-compliance to be addressed. Following the recommendations made by the 2015 CQC visit, in October 2016, the hand hygiene audit tool was re designed to capture specific compliance with 'Bare Below the Elbows'.

Surgical Division	ICNA	Combined Environment	Clean Hands Compliance	Bare Below the Elbow Compliance	High Impact Interventions	Medical Division	ICNA	Combined Environment	Clean Hands Compliance	Bare Below the Elbow Compliance	High Impact Interventions
Apr-16	99.50	Introduced Oct 16	90.70	Introduced Oct 16	99.70	Apr-16	97	Introduced Oct 16	98	Introduced Oct 16	100
May-16	100.00		91.70		100.00	May-16	98.5		97.6		100
Jun-16	98.90		97.60		100.00	Jun-16	99.8		95.9		100
Jul-16	100.00		99.50		100.00	Jul-16	99.4		100		100
Aug-16	97.20		95.90		100.00	Aug-16	98.5		100		100
Sep-16	98.90		99.00		100.00	Sep-16	99.6		99.7		100
Oct-16	Discontinued Oct 16	96.40	92.33	98.72	100.00	Oct-16	Discontinued Oct 16	96.86	97.73	99.59	100.00
Nov-16		94.13	100.00	98.46	100.00	Nov-16		96.99	98.05	97.80	100.00
Dec-16		97.40	98.33	92.86	98.00	Dec-16		97.62	99.38	98.76	100.00
Jan-17		94.06	94.98	98.25	100.00	Jan-17		95.92	95.24	100.00	100.00
Feb-17		94.37	100.00	97.65	100.00	Feb-17		97.11	97.62	99.40	99.83
Mar-17		97.62	98.67	95.64	100.00	Mar-17		98.48	97.68	99.51	100.00
Average	97.37		96.56	96.93	99.81	Average	97.98	98.07	99.18	99.97	

Theatre/OPD Division	ICNA	Combined Environment	Clean Hands Compliance	Bare Below the Elbow Compliance	High Impact Interventions
Apr-16	99.00	Introduced Oct 16	99	Introduced Oct 16	98.6
May-16	99.30		99.1		100
Jun-16	99.20		98.3		100
Jul-16	97.30		100		100
Aug-16	96.10		99.4		99.9
Sep-16	100.00		93		100
Oct-16	Discontinued Oct 16	98.25	96.16	98.935	100
Nov-16		93.84	97.22	97.22	100.00
Dec-16		94.74	100.00	98.89	98.80
Jan-17		97.90	97.80	98.90	98.20
Feb-17		97.20	96.69	98.00	98.60
Mar-17		99.03	92.60	99.55	96.25
Average	97.66		97.44	98.58	99.20

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Overall, the perception of IPC audits has improved following the introduction of the new audit programme. The results above reflect the positive results achieved in C4C audits and the CQC inpatient survey this year.



As demonstrated above, the overall hand hygiene and bare below the elbow compliances demonstrate good practice by all disciplines included in the audit. The SureWash hand hygiene training system allows annual competencies to be performed in all areas regardless of facilities available. The competency document has been update to capture the condition of care works hands – in prevention of contact dermatitis & promoting healthy hands across the Trust.

### Validation Auditing

The peer review audits are complemented by validation audits undertaken by the infection control team.

Areas reviewed in 2016/17 are shown below. All areas received copies of audits completed alongside action plan templates and suggestions for improvements in the clinical environment. Staff are encouraged to use the 'Planet FM' system to document environmental issues requiring estates attention.

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### TSSU

- Areas of improvement required include a descaling programme, increased environmental cleaning frequencies.

### Gladstone Ward

- Areas of improvement required include a cluttered clinical environment, education for patients/ relatives on the importance of minimising personal belongings to allow domestic staff to perform high standards of cleaning.

### Hand Unit

- Areas of improvement required include furniture with non wipeable materials to be replaced, clutter to be removed, to ensure clinical supplies are in date.

### Theatres

- Areas of improvement required include a cluttered clinical environment, ensure access to ventilation system is not blocked, cleaning and waste stream issues to be actioned.

### Urodynamics Within x-ray environment

- Areas of improvement required include improved access to sluice facilities, cramped clinical area to be reviewed.

### Orthotics: RSH

- Areas of improvement required include overstorage of orthosis, access to sluice facilities to be improved, plinth to be recovered.

### Swimming Pool

- Areas of improvement required include replacement of rusted lockers, rusted clinical equipment.

### Baschurch

- Areas of improvement required include storage issues across the new unit - shelving, cupboards and racking required.

### Menzies Endoscope Decontamination Unit

- Areas of improvement required include a descaling programme, re-organisation of equipment, purchase of new decontamination device.

### Wrekin

- Areas of improvement required include pitted flooring, cluttered clinical environment, chips in paintwork around sinks.



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### 1.2.3. Criterion 2: Provide and maintain a clean and appropriate environment

The Trust understands the importance of a clean, appropriate environment and focuses on providing excellent outcomes.

#### Cleanliness

Cleaning is provided by the Trust's in-house team of cleaners and deep cleaners; the internal team is supported by external window cleaners and pest control operatives. Cleaning staff are allocated to their own area, giving them ownership of the standard; the number of hours for each area is determined by the Credits for Cleaning information system, with further input from local stakeholders, on a risk adjusted basis.

Outcomes for cleaning are monitored through several sources including internal monitoring, internal patient satisfaction surveys, the PLACE assessment and the CQC inpatient survey.

#### Cleanliness – Deep Cleaning

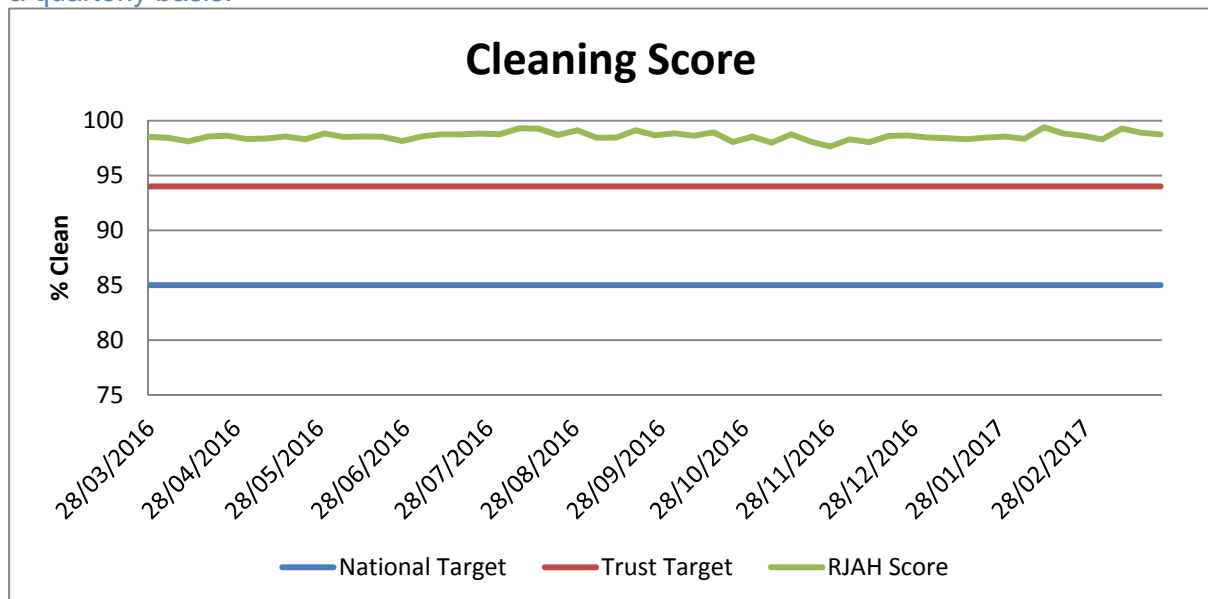
Whilst routine cleaning is completed in all areas on a daily basis, staff in high risk areas are supported with extra staff to complete a deep clean on a weekly basis. In the very high risk area of theatres there is a rolling deep clean programme that runs alongside the routine clean; cleaning in these areas is completed over night, when the theatres are not in use, to provide the most effective service.

In case of an outbreak, the Trust recognises the potential need to employ the use of technologies such as hydrogen peroxide vapour for the fogging of facilities and equipment. The Trust now also has a working relationship with Bioquell, whose service can be called upon as need requires it.

#### Cleanliness – Internal Monitoring

The Housekeeping Department has devised an effective sign-off sheet that allows staff to easily demonstrate the work they have completed and alert the next person on shift to any outstanding requirements. Evidence of cleaning is retained by the department and is validated by supervisor monitoring.

Internal monitoring is carried out every day, visiting all areas on a weekly basis. Very high risk areas are monitored by a clinical team to ensure the broadest picture is seen. All required improvements identified by the audits are acted upon by the internal team and the results, along with the patient survey, go to the Infection Prevention & Control Committee on a quarterly basis.



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The Trust has a risk based national cleanliness target of 85%, internally the Trust has set a 94% target, for the year 2016/17 the Trust achieved an average score of 98.5%.

### Cleanliness – Patient Satisfaction – Internal

Internal monitoring very much aligns to the feedback PALS (Patient Advice and Liaison Service) receive from the patient. On a monthly basis an internal team speaks to patients one to one and also reviews feedback forms that the patient can fill in privately. The results are fed back to the Estates and Facilities team to act upon. Satisfaction for cleanliness in 2016/17 was recorded as 99.7%.

Were you satisfied with the hygiene of the Ward					
Month	Always	Mostly	Sometimes	Never	Don't know
Apr-16	241	13	1	0	3
May-16	251	8	2	0	9
Jun-16	305	14	0	0	5
Jul-16	301	12	1	0	4
Aug-16	244	11	2	0	4
Sep-16	277	14	0	0	10
Oct-16	271	13	0	0	8
Nov-16	292	12	1	0	6
Dec-16	205	4	1	0	4
Jan-17	293	12	2	0	7
Feb-17	308	12	0	0	5
Mar-17	364	14	2	0	2

### Cleanliness – Patient Satisfaction – CQC

Further triangulating available data it has been identified, through the CQC adult inpatient survey 2016, that patient satisfaction averaged 96% over the two cleanliness related questions; the 96% score achieved represents the highest average score in the country.

### Cleanliness and Environment - Kitchen

The Trust has again been awarded a 5 Star rating for its food hygiene environment by the area Environment Health Officer.

### PLACE – Patient Led Assessment of the Care Environment

The 2016 PLACE assessment identified many positives for the Trust and also areas to work upon. In relation to cleanliness and the environment;

- Cleanliness maintained its historical high score, in line with other internal and external audits; minor issues were identified and subsequently rectified immediately.
- Condition, Appearance and Maintenance improved its score from the previous year, but it still trailed the national average. The low score was predominantly as a result of a lack of solid sided bins; to ensure going forward this is resolved the Trust has catalogued 3 bins for purchase by all areas that meet this criteria, whilst also addressing the issue of noise at night by being soft closing and having a small ramp on the pedal, ensuring the bin can be opened by wheelchair users.

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The Trust has already completed its 2017 assessment; initial outputs demonstrate an improvement in each metric. Full results will be published later this year.

All PLACE elements are addressed through the quarterly Infection Prevention & Control Committee; these include elements that fall outside of Criterion 2; cleanliness and the environment.

### Estates Department Contribution to the Clean and Appropriate Work Environment

Estates department activity is essential in delivering the IPC agenda, and is delivered under the principles outlined in two main documents:-

1. Health Building Note 00-09 (Department of Health, 2013 -which supersedes and replaces all versions of Health Facilities Note 30) and covers the importance of a clean, safe environment for all aspects of Healthcare.
2. Health Technical Memorandum 04 01, The Control of Legionella, hygiene, "safe" hot water, cold water and drinking water systems."

Part A: Design, installation and testing and

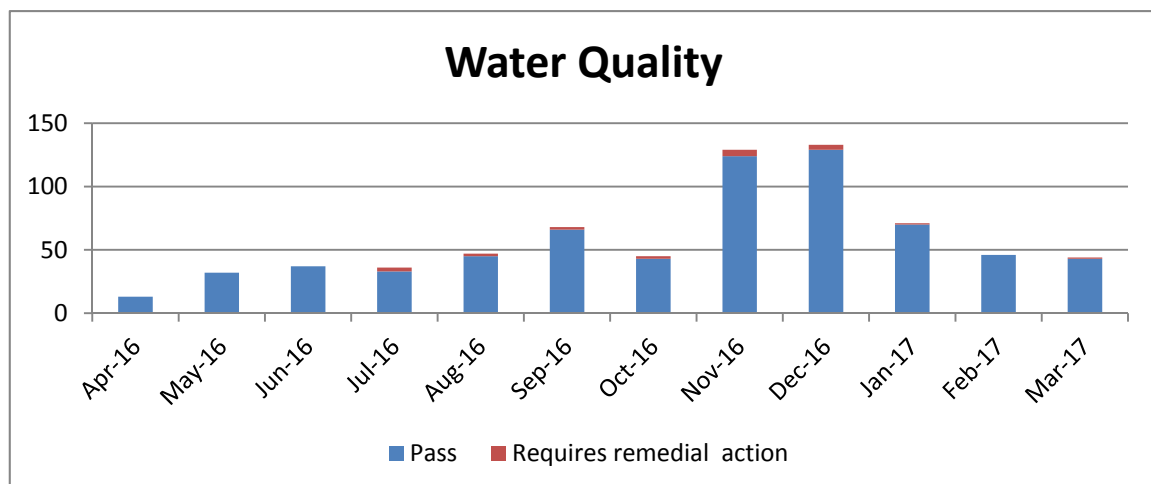
Part B: Operational management. (Department of Health (DOH) 2006). CWP's 'control of Legionella' closely adopts the requirements of the above HTM.

### Water

The control of water is covered by the legal requirements of the Health & Safety at Work Act 1974 concerning risks from exposure to legionella and guidance on compliance with the relevant parts of the Management of Health and Safety at Work Regulations 1999.

Water safety is managed and controlled by the estates department. The Estates department continues to employ the services of Oakleaf, who provide professional water services and undertake water risk assessments on Trust properties where required following significant infrastructure changes. Oakleaf has written a site specific scheme of control for each inpatient premises. Exova provides an internet based water testing database storage and reporting for statutory test results. There is also a three monthly review of test results, control measures and procedures to ensure compliance with current legislation and these results are published at the Infection Prevention Control Sub Committee.

Estates Operational Service continually undertake water tests throughout the Trust estate, during April 16 – March 17 at total of 701 water sample tests were undertaken, with 97.1% of tests being within specified limits. Those tests which recorded a score outside of the most stringent parameters were actioned for immediate resolution; actions included water flushing and replacement of taps. The levels recorded were of no concern to patient safety.



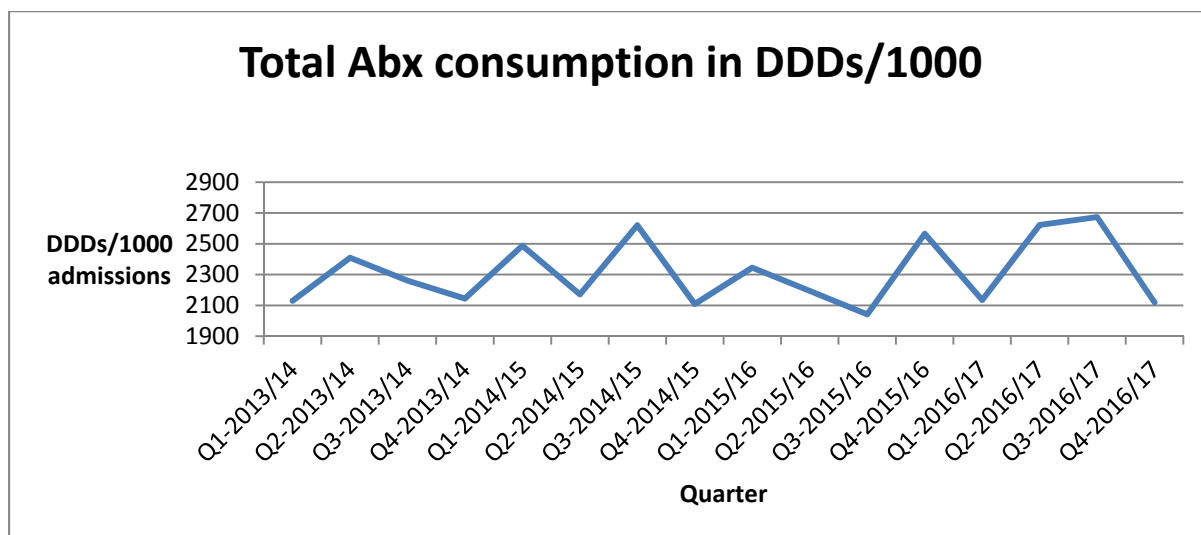
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### 1.2.4. Criterion 3: Ensure appropriate antimicrobial use

In April 2016 an antimicrobial pharmacist (0.5 WTE) was appointed. The Antimicrobial Stewardship (AMS) Committee continued to meet quarterly and reviewed its terms of reference and membership in line with the updated PHE AMS guidelines (Start Smart then Focus).

The committee discusses antibiotic consumption and antimicrobial issues within the trust and has also included discussion of antimicrobial Datix incidents at each meeting and agreed an audit plan for 2017-18.

Monitoring of antibiotic consumption in the trust has been ongoing with a change in computer system in November 2015 to the JAC system. Consumption of carbapenems and piperacillin/tazobactam has specifically been monitored. Consumption in DDDs/1000 admissions is now being calculated and has been done retrospectively to give a comparison to historical data.



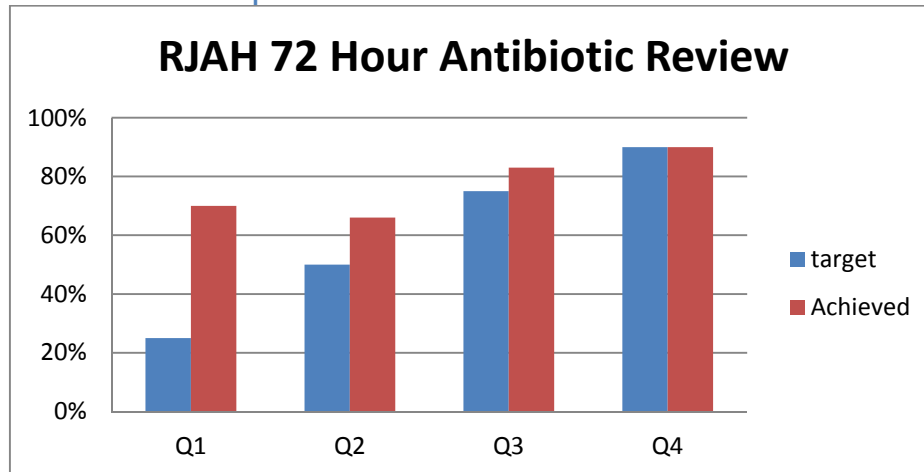
Weekly ward rounds have continued and are now under taken by the visiting microbiologist, antimicrobial stewardship pharmacist and Infection Control nurse who collaboratively review patient's antibiotics. This has been extended, this year to include all wards in the hospital (paediatric and elderly rehabilitation) and to review all antibiotics, oral as well as intravenous.

In addition, a 'microbiology ward note' has been added to the EPR system to enable the microbiologist assigned to the trust, to make specific recommendations on patient notes regarding their antimicrobials.

### CQUIN

Achievement of 2016-17 CQUIN of Empiric review of antibiotics within 72 hours has been achieved for all quarters. A combination of education of prescribers, using a sticker as a prompt and the use of trust communication methods meant the rate of review steadily increased meeting the 90% target in the fourth quarter.

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**Achievements**

- A snapshot audit was done over a week in January 2016 to evaluate whether patient's have their allergy status documented on their drug card, an indication for their antibiotics documented, whether there has been a stop/review date documented, an appropriate route prescribed for their antibiotic and whether the trust antibiotic policy was followed in prescribing the antibiotic. Over 90% was achieved in all five standards.
- A re-audit of whether appropriate doses of IV Vancomycin are used for the treatment of infections, in accordance with the trust antibiotic policy took place in July 2016. Areas requiring improvement included clarification of the policy with respect to dose to be prescribed and education of ward staff with respect to timing and documentation of samples sent to microbiology for blood levels.
- Antimicrobial Stewardship (AMS) reference sources have been added to RJAH intranet for all staff to obtain easy access to relevant guidance.
- A brief overview of AMS has been incorporated into the registrar induction days.
- This year has also seen the incorporation of an AMS presentation and answer session into the in-house nurse training.
- From August 2016 documentation of indication and course length of antibiotics prescribed on drug cards was included into the STAR (Quality Improvement Programme) for assessment.
- A HEE antimicrobial resistance e-learning was approved for use in the trust, to be completed by all clinical staff every two years.
- European Antibiotic Awareness day was marked in November 2016 with a promotional stand in the hospital entrance exhibiting materials and where members of the public and staff were encouraged to become 'Antibiotic Guardians' on an iPad that was made available.

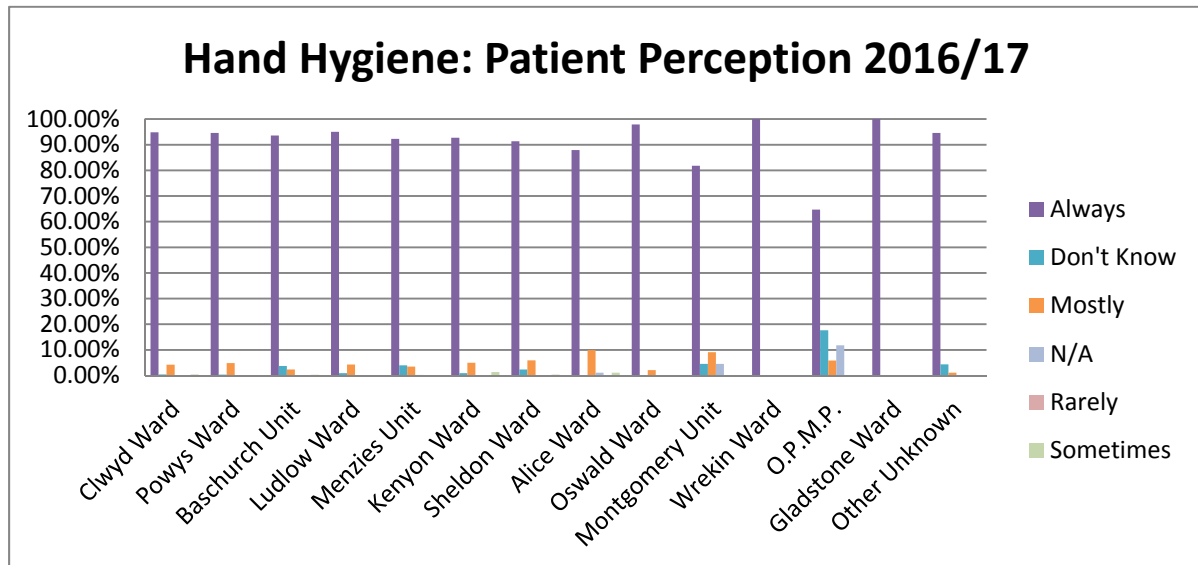
**1.2.5. Criterion 4: Provide suitable accurate information on infections to service users-**

All patients with alert organisms are seen by the infection control nurse and information leaflets are provided. The microbiologist will also give advice and support to patients and their relatives upon request.

The Trust promotes best practice in infection prevention and control to its patients, relatives and visitors; highlighting the roles they can play in preventing infection through the website, targeted poster campaigns, and promotional events such as hand hygiene day.

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The patient comment cards are used as a resource of data – including a specific question asking “Did the staff practice good hand hygiene”. The results shown below provide encouraging feedback from a patient’s perspective.



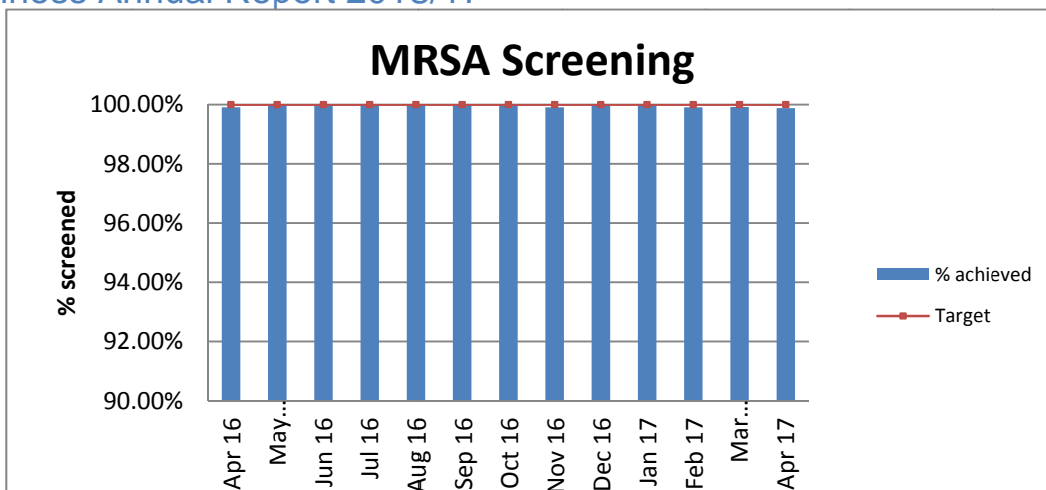
### 1.2.6. Criterion 5: Ensure prompt identification of people who have or are at risk of developing an infection

As part of the one together collaborative POAU have adapted the patient information leaflet with the aim of reducing the incidence and consequences of surgical site infection. Based on the WHO and NICE guidelines of the pre-operative phase, actions to be implemented for best practice include pre-operative showering, hair removal and the importance of keeping warm prior to surgery – encouraging patients to take responsibility for their role in prevention of infection pre operatively.

An alert process has been set up within the pre op unit to identify patients who are at risk or require extra attention – this includes those unable to maintain high levels of hygiene standards, with poor quality skin or at risk of falls. Stakeholders receive an email with patient summaries and suggestions of actions to be in place in readiness for admission & surgery.

MRSA positive cases are alerted to the IPCT daily as part of the lab reporting system, which are disseminated to the relevant departments; this ensures that positive cases can be decolonised within a timely framework preventing prolonged postponements of patient surgery.

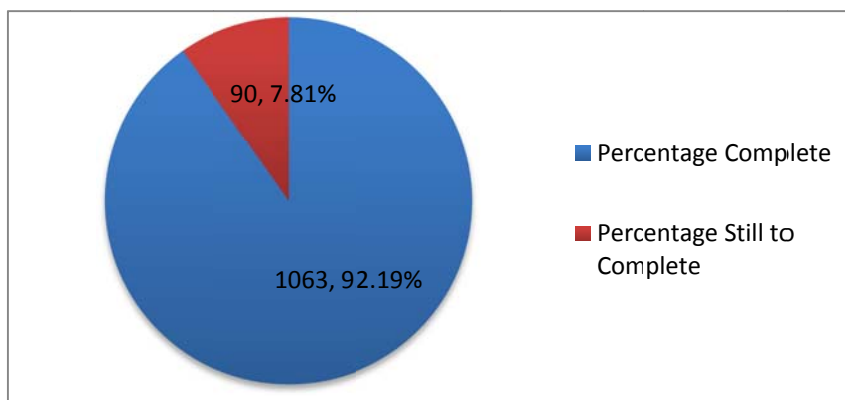
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The graph above demonstrates the MRSA screening compliance which is consistently above 99%, set against a Trust target of 95%.

1.2.7. 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.

The provision of IPC training is met through provision of a mandatory e-learning package based on Department of Health evidence based infection control guidelines. In total 1063 staff have completed this training during 2016/17.



- Facilities Management and Estates contract staff are also required to undertake induction and annual mandatory training including a competency assessment, which is provided by the IPCN.

Additional training sessions provided by the IPCT include:

- Induction training of 45 minutes for all clinical and non-clinical staff (separate sessions for junior hospital doctors).
- All new/rotational doctors receive a short induction session provided by the IPCT.
- All volunteers receive a short training presentation and hand hygiene education.
- The team is part of the work experience programme run by the Trust on a quarterly basis.
- Provided 'train the trainer' education for link practitioners.
- Engage in the work experience programme based at RJAH

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- Engage in the Trust preceptorship programme
- Provided workshop training sessions at ward training days.



The Trust supports the World Health Organisation in its annual 'Call to Action' for Hand Hygiene Day. The theme for 5<sup>th</sup> May 2016 was 'Safe Surgical Hands'; highlighting the importance of hand hygiene throughout the surgical pathway. The infection control team had a stand in the main entrance promoting the importance of hand hygiene in the healthcare environment. This proved to be successful allowing the infection control nurse to answer any queries / issues that visitors raised regarding infection prevention and control throughout the trust.

In December 2016, the Surgical Site Surveillance Nurse and the Infection Control Analyst attended PHE Colindale to take part in SSISS training. The training gained invaluable insight into the surveillance process including post discharge surveillance, and SSI criteria.

### 1.2.8. Criterion 7: Provide or secure adequate isolation facilities

The Trust has always been able to accommodate patient isolation with minimal disruption to the running of the wards. In 2016, difficulties arose during the MRSA outbreak, whereby multiple patients required barrier nursing, which highlighted the need to have more than one bay with closing (glass) doors to enable cohorting of patients with the same infection whilst complying with same sex accommodation. A capital bid has been submitted to the executive team for approval.

### 1.2.9. Criterion 8: Secure adequate access to laboratory support as appropriate.

The management of prosthetic joint infection is challenging, the microbiology ward round is held once a week with the microbiologist, infection control nurse and the antimicrobial pharmacist. Each patient is reviewed and requires a tailored approach of antimicrobial prescribing due to the microorganisms grown on culture.

The microbiology lab sends a daily list of all positive samples including sensitivities. This enables all patients to receive the appropriate treatment/antibiotic therapy and prompt isolation if required.

### 1.2.10. Criterion 9: Have and adhere to policies, designed for the individual's care and provider organisations that will help to prevent and control infections

Infection Prevention & Control Policies & Standard Operation Procedures (SOP) are reviewed and agreed at the Infection Prevention & Control Committee.



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IPC currently operates with 1 Infection Prevention & Control Policy, A framework of Infection Prevention & Control and 30 specific IPC SOP.

Policies Reviewed in 2016 - 17	
HCAI Reporting	Diarrhoea & Vomiting
IPC Protocol	Aspergillus
IPC Framework	CPE
C difficile	Cleaning & Decontamination
Decontamination of Mattresses	MRSA - Awaiting ICC Comments for Approval
Emergency Pool Plan	

### 1.2.11. Criterion 10: Providers have a system in place to manage the occupational health needs and obligations of staff in relation to infection.

#### Sharps Safety

The annual Trust wide audit of compliance with sharps practice was undertaken by Daniels Healthcare Ltd.

- 33 wards/departments were audited
- 26 wards/departments demonstrated compliance of >95%
- 6 wards/ departments demonstrated compliance of 85-94.9%
- 0 wards/departments demonstrated compliance of <85%

Audit results and photographic evidence were shared with the ward managers at the SNAHP monthly meeting.

#### Occupational Health

Team Prevent is committed to the protection of all Trust employees as an essential part of Infection Control.

In line with the Health and Social Care Act 2013 and Department of Health Guidelines, Team Prevent have arrangements in place for assessing the immunisation status of all Trust employees as well as regularly reviewing the immunisation status of existing healthcare workers and providing vaccinations as necessary and in accordance with the Green Book to reduce the risk and spread of vaccine-preventable disease.

Team Prevent also plan and facilitate the annual Seasonal Flu Immunisation Programme.

The final submission results to *Immform* for 2016/17 season resulted in achieving 50.8% of all frontline healthcare workers having the flu vaccine. This is an improvement on the 2015/16 figure of 43.0%.

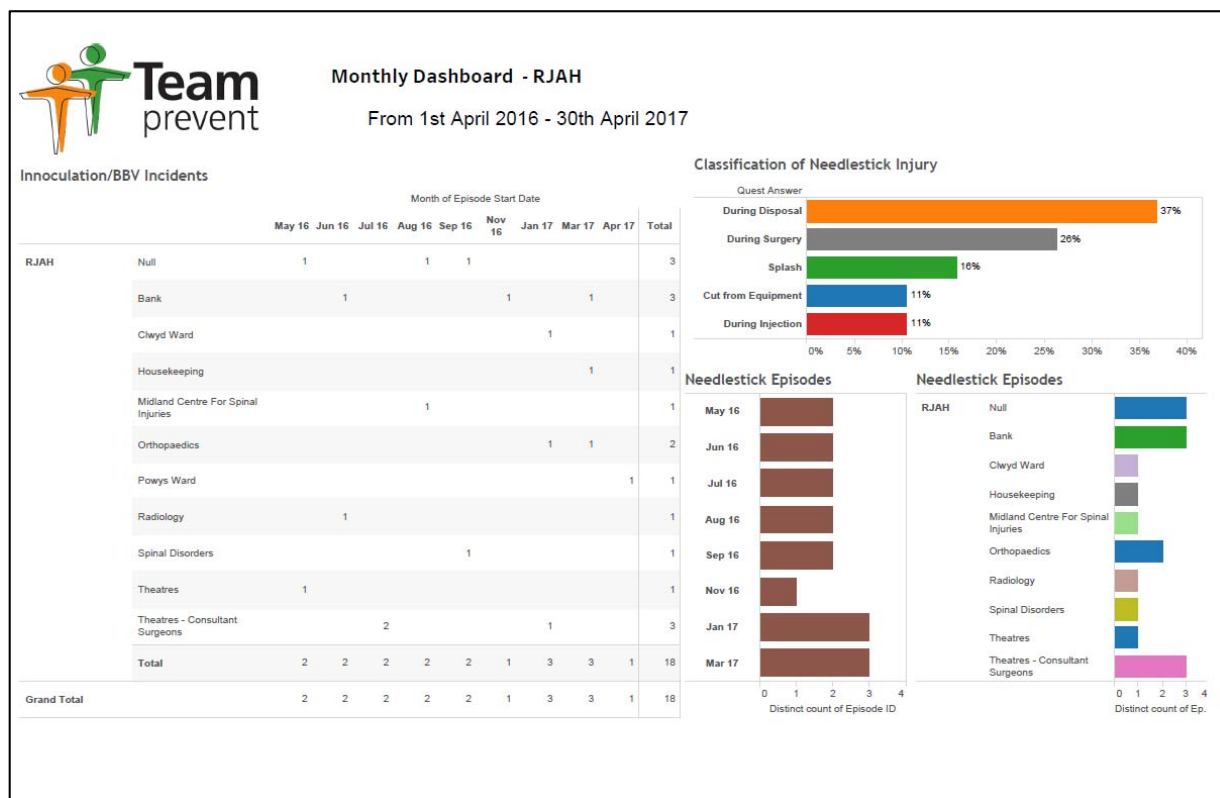
- Blood Borne Virus Exposure Incidents

Team Prevent are cognisant that Blood Borne Virus Exposure incidents or injuries represent a significant risk to staff working in health care environments

Under Health and Safety Legislation, Team Prevent work collaboratively with the Trust to ensure their responsibility for the health and safety of staff in relation to preventing, reducing and controlling the risks of healthcare associated infection and management of occupational exposure to blood-borne viruses and post exposure prophylaxis.

Team Prevent are responsible for the assessment and follow up of all Blood Borne Virus exposure incidents occurring during departmental opening hours and for the follow up of those exposure incidents occurring out of hours in Emergency Departments.

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**1.3. Serious Incidents/ Periods of Increased Incidence**  
**MRSA outbreak**

At the end of November three patients were identified as acquiring MRSA in their wounds, having had negative screens on admission. Screening of all patients on the ward identified a further 6 patients colonised with MRSA in nasal screens, having previously had negative admission screens. An outbreak control team was convened, which included the Head of Infection Control (Shropshire & Telford and Wrekin CCG) and advice from Public Health England and actions put in place to try to prevent any further spread including: prompt isolation/cohorting of affected patients, a full deep clean programme, re screening protocol and reinforcement of hand hygiene throughout the unit.

The screening programme identified a further 2 cases on MRSA in wounds during December and January. Due to the ongoing transmission, a decision was made by the microbiologist to screen all ward staff and to have the ward deep cleaned using Hydrogen peroxide vapour (HPV). This process took two days and was performed at a time of reduced activity to minimise disruption as much as possible for the ward environment.

As part of the investigation by the outbreak control team, key areas for improvement were collated into an action plan and monitored through the Infection Prevention & Control Committee.

**MSSA Bacteraemia**

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There has been one case of MSSA bacteraemia on Gladstone ward in 2016/17. The patient became acutely unwell with pyrexia and tachycardia. The Sepsis six bundle was commenced; blood cultures obtained grew a staphylococcus aureus in the blood stream. The patient had an infected cannula site which also grew staphylococcus aureus which was the primary focus of the bacteraemia. The RCA identified poor documentation around the VIP score for this patient. The Trust requires to review VIP scoring of invasive devices to reduce the incidence and consequences of infection related to peripheral vascular access devices, by investing in an electronic format.

### Infections Following Joint Injections

A cluster of three streptococcal infections following upper limb joint injections was identified in March. A route cause analysis of these cases has been undertaken; this identified a number of potential contributory factors, including absence of a Trust wide protocol for joint injection, poor documentation and the lack of a clear protocol of skin preparation prior to injection. The action plan formed as part of the RCA will be monitored through the Infection Prevention & Control Committee.

### 1.4. Conclusion

The Infection prevention and control team have continued to provide an essential service to the Trust encompassing the Infection Prevention and Control service and surgical site surveillance service, microbiology ward rounds, route cause analysis meetings and wound clinic and tissue viability that has come under the teams remit in addition to the statutory requirements of the Health and social care Act (2008).

The Trust has achieved the targets for alert organisms. The MRSA outbreak has improved the communications/relationship with the domestic and ward team and has highlighted the need to remain clutter free.

### Key Areas of Focus for 17/18

Achieving all National targets: 0 MRSA Bacteraemia; 2 C difficile Infections	RCA of all E.coli bacteraemia.	RCA of all MSSA bacteraemia.
Improve website and intranet.	Research into dedicated IPC software.	Vital Pac - Incorporate VIP scoring module.
Introduce annual competencies for ANTT.	Participate in the proposed 'Joint Infection' Multi Disciplinary Team.	Additional surgical site surveillance as part of the GIRFT initiative.

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**Appendix 1: Acronyms**

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AMS	Antimicrobial Stewardship Committee
ANTT	Aseptic Not Touch Technique
CCDC	Consultant in Communicable Disease Control
DDD	Defined Daily Dose
DIPC	Director of Infection Prevention & Control
E.Coli	Escherichia coli
EPR	Electronic Patient Record
GIRFT	Getting It Right First Time
HCAI	Healthcare Associated Infection
HEE	Health Education England
IPC	Infection Prevention & Control
IPCC	Infection Prevention & Control Committee
IPCT	Infection Prevention & Control Team
IV	Intravenous
JAC	JAC – Electronic Pharmacy System
MRSA	Methicillin-resistant Staphylococcus aureus
MSSA	Methicillin-sensitive Staphylococcus aureus
OPD	Outpatient Department
PHE	Public Health England
RCA	Route Cause Analysis
SCCG	Shropshire Clinical Commissioning Group
SNAHP	Senior Nurse and Allied Health Professionals
SOP	Standard Operating Procedure
STAR	Sustaining Through Assessment and Review
TSSU	Theatre Sterile Services Unit
TWCCG	Telford & Wrekin Clinical Commissioning Group
VIP	Visual Infusion Phlebitis