

# Infection Control Annual Report

April 2018 – March 2019



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## Executive Summary

Moorfields Eye Hospital NHS Foundation Trust (MEH) is committed to ensuring that effective prevention and control of healthcare associated infections (HCAIs) is embedded into everyday practice. Keeping patients safe from avoidable healthcare associated infections remains a high priority for the trust.

The Trust has a statutory responsibility to be compliant with The Health and Social Care Act 2008 (DH, 2015). A requirement of this Act is for the Board of Directors to receive an annual report from the Director of Infection Prevention and Control (DIPC).

The purpose of this report is to provide assurance to the trust board of the progress made in the prevention and control of healthcare associated infections (HCAI) for the reporting period from 1<sup>st</sup> April 2018 to 31<sup>st</sup> March 2019 through delivery of an effective programme of work. In addition the report provides assurance that appropriate measures are being followed to maintain the safety of patients, visitors and staff.

### The key achievements for 2018/19

During the past year the Trust has maintained and achieved in the following areas:

- The rates of infection for the trust overall have remained low with no cases of bacteraemia nor *Clostridium difficile* to report.
- Endophthalmitis rates of infection for cataracts, intravitreal injections, vitrectomy, acute glaucoma and corneal grafts have been reported below the trust benchmarks
- High standards of hand hygiene compliance have been maintained throughout the trust with an average compliance score of 97%.
- Infection control training of all trust staff has remained above the 80% target figure throughout the year.
- The infection control audit programme for this year has been completed
- Reporting on infection rates against trust benchmarks has increased from two to six procedures.
- The trust was successful in achieving the national flu target for staff influenza immunisations with a compliance score of 78%.
- An alcohol-based hand rub solution was introduced in operating theatres and intravitreal injection rooms for undertaking a surgical scrub

## Introduction

Healthcare associated infections (HCAI) can cause harm to patients compromising their safety and leading to a suboptimal patient experience, therefore prevention of a healthcare associated infections remains a key priority for the trust. The Infection Control Team at MEH strives to promote and embed evidence based best practice with regards to the prevention and control of infection and maintain patient safety. The Infection Control Nurses (ICN's) do recognise that infection control is everyone's responsibility and must remain a high priority for all staff to ensure that patients are safe from acquiring a preventable HCAI.

During the year, the ICN's have worked with staff across all sites to enable effective infection prevention and control and safe reliable services. The delivery of this assurance may not always be within the remit of the infection control team, but clear responsibilities, competence and timely reporting of information is fundamental to achieving this.

## Delivery of Service

The infection control team has continued to lead on the implementation of the infection control work plan and audit programme and provide advice about the prevention and control of infection.

### Duties

- The infection control service is delivered and facilitated by an infection control team which consists of:
- One 0.8 Infection Control Matron, Two 1.0 WTE Infection Control Nurses, Infection Control doctor as part of a service level agreement with Guys and St Thomas' NHS Foundation Trust, a designated Director of Infection Prevention and Control, Consultant Ophthalmologist who is the chair of the Infection Control Committee and One 1.0 WTE Administrator. The administrator post is shared with the Resuscitation Team.
- The trust also has a 1.0 WTE antimicrobial pharmacist.
- The main microbiology and virology laboratory services are provided by an off-site independent company called The Doctors Laboratory who the trust has arranged a Service Level Agreement with although there are other providers. Infection control support and advice is provided by Guys and St Thomas' NHS Trust infection control team. Additional support is provided by Moorfields Estates and Facilities Teams, matrons, infection control link practitioners and sterile services department. The Occupational Health service is provided by Team Prevent on a contracted basis.
- The Director of Infection Prevention and Control (DIPC)
- The Infection Control Team reports directly to the DIPC, who is the trust Director of Nursing and Allied Health Professions and the Decontamination Lead. The DIPC is directly accountable to the Chief Executive and has an overarching responsibility for the strategy,

policies, implementation and performance relating to infection prevention and control. The DIPC attends the trust board and other meetings as planned or required, including the monthly infection control team meetings and quarterly infection control committees.

### **Delivery of Service**

- The trust Infection Control Committee (ICC) is a multidisciplinary trust committee which meets quarterly. The committee ensures that there are effective systems in place to reduce the risk of infection and where infection does occur to minimise its impact on patients, visitors and staff.
- The committee is chaired by the Chairman of the Committee and Ophthalmology Consultant in the Medical Retina (MR) Service.
- Membership of the ICC includes representation from key service areas:
- Facilities, Estates, Pharmacy, Theatre, Surgical Services Department, Eye Bank, Infection Control Nurses, DIPC, Infection Control Doctor & Deputy DIPC from GSTT, Occupational Health, Risk and Safety, Representation from Public Health England and the Commissioning Support Unit.
- Other trust staff may be invited to attend as required.

### **Director of Infection Prevent and Control (DIPC) Role**

- Governance Structure

The DIPC co-chairs the Clinical Governance Committee (CGC) with the Medical Director which meets every two months. Minutes from the ICC are sent to CGC and there is also infection control representation at CGC.

### **Infection Control Committee**

- Infection Control Representation at Committees

Infection Control has representation on the Risk and Safety Committee and Medical Devices Committee.

### **Programme of Work**

- The Infection Control Team is responsible for ensuring that a coordinated programme of work is agreed at committee and implemented annually.

### **IC Links**

- Infection control link-staff meet every 6 months for training updates and infection control news and in addition attend annual study days and an annual conference which is provided by Guy's and St Thomas' infection control team.

### **Education and Training**

- The ICNs provide education and training throughout the organisation, undertake a programme of audits, policy formulation, alert organism surveillance with associated epidemiology of cases and provide infection control support as required to staff both internal and external to the trust. The matron and lead ICN attend the quarterly London region DIPC forum to share trust experience and current infection issues.

## Infection Control Programme of Work

### IC Programme

- The ICNs work to an annual programme of work (POW) that is produced to assist in providing assurance and monitoring the trusts compliance with the Code of Practice. The POW is set out against the criteria of the Code of Practice.
- Progress against the programme of work is discussed at the quarterly ICC and the monthly infection control team meetings.
- This year the ICN's have completed the audit programme of work for 2018/19.

## Trust Surveillance of Possible Healthcare Associated Infections

The Infection Control Committee has agreed the following alert incidents for continuous surveillance within the trust to ensure that healthcare associated infections relevant to ophthalmology patients is promptly recognised, investigated and managed.

### Performance Data

	2017/18	Target	2018/19	Q1	Q2	Q3	Q4	YTD
C diff infection	0	<b>0</b>	0	0	0	0	0	<b>0</b>
*Bacteraemia	0	<b>0</b>	0	0	0	0	0	<b>0</b>
MRSA Screening	100%	<b>100%</b>	100%	100%	100%	100%	100%	<b>100%</b>
Endophthalmitis post cataract	0.22	<b>0.40</b>	0.64	0.00	0.33	0.43		<b>0.35</b>
Endophthalmitis post intravitreal injection <sup>1</sup>	0.15	<b>0.50</b>	0.09	0.34	0.08	0.17		<b>0.17</b>
Endophthalmitis post vitrectomy	-	<b>0.60</b>	0.90	0.00	0.00	0.00		<b>0.22</b>
Endophthalmitis post-acute glaucoma	-	<b>1.0</b>	1.44	0.00	0.00	1.35		<b>0.73</b>
Endophthalmitis post Graft-EK	-	<b>3.60</b>	8.40	0.00	0.00	0.00		<b>2.58</b>
Endophthalmitis post Graft-PK	-	<b>1.60</b>	0.00	0.00	0.00	0.00		<b>0.00</b>
Adenovirus possible hospital acquisition	1.5%	<b>N/A</b>	0.8%	1.1%	3.4%	0.0%		<b>1.2%</b>

\*Bacteraemia includes MRSA, MSSA, E coli, Pseudomonas aeruginosa & Klebsiella Spp.

The trust submits data to the national HCAI Data Capture System monthly as required.

### Endophthalmitis

- Endophthalmitis at Moorfields Eye Hospital (MEH) is defined as an inflammation or infection of intraocular space diagnosed within 6 weeks of surgery or of any invasive procedure (e.g.



suture removal or intraocular injection) or within 16 weeks of surgery where the pathogen is fungal in nature and vitreous and aqueous fluid specimen and treatment with intravitreal antimicrobial therapy has been required. All infections identified beyond the 16 weeks' timescale will be investigated for up to one year to check whether the infection is linked to the original ophthalmic procedure.

- MEH incidence data is based on clinical criteria and not only on those cases which yield a positive microbiology culture.
- The trust reports on infections following all procedures MEH and has in preceding years established two specific benchmarks for cataracts and intravitreal injections.
- All cases of endophthalmitis are reported either as benchmarked or exception reported cases.

### Benchmarked Endophthalmitis

In addition to cataract surgery and intravitreal injections benchmarks have been agreed for a further four further ophthalmic procedures. These include External Disease (PK and EK procedures), Glaucoma (acute cases) and Vitreoretinal (Vitreotomy). Reporting on the rates of infection against the benchmarks for these procedures commenced from 1<sup>st</sup> April 2018.

### Cataract Endophthalmitis

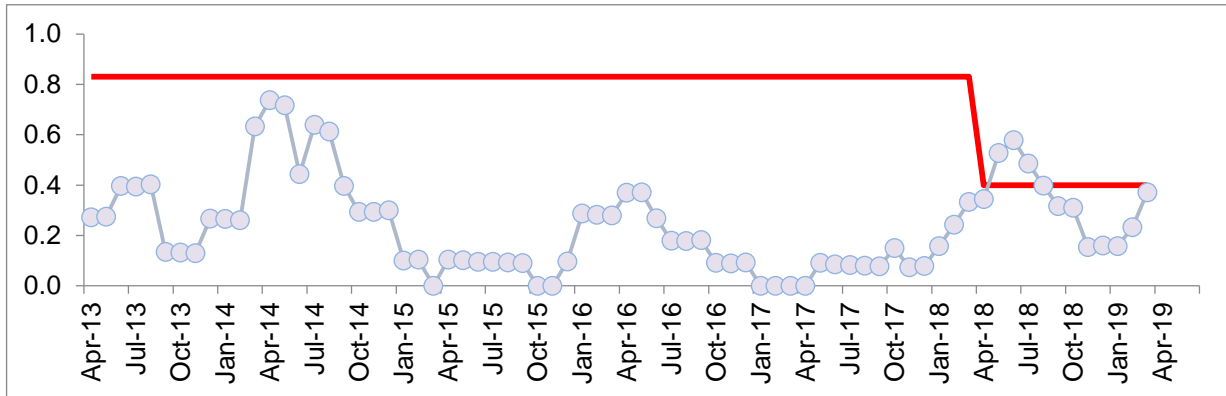
- The benchmark for cataract related endophthalmitis was lowered from 0.83 per 1000 procedures to 0.4 per 1000 procedures from 1st April 2018.
- For 2018/19 the total number of cataract related cases of endophthalmitis was 9. This is an increase in number from 2017/18 where there were 5 cases.
- The rate of endophthalmitis following cataract procedures for this year is **0.35 per 1000 procedures** which remains below the benchmark of **0.40**.

**Table 1A: Quarterly surveillance of cataract Endophthalmitis**

Endophthalmitis - quarterly	2018/19					2017/18	2016/17
	Q1	Q2	Q3	Q4	YTD	YTD	YTD
Post Cataract	4	0	2	3	9	5	1
Cataract procedure (HRG)	6207	6435	6115	7025	25782	22946	19782
Rate post cataract per 1000	0.64	0.00	0.33	0.43	0.35	0.22	0.05

- A root cause analysis was undertaken for each case and no common themes were identified. The cataract service lead was made aware of the increase the number of endophthalmitis cases.

Fig 1B: Rate of Endophthalmitis post Cataract Surgery – 6month rolling average



**Intravitreal Injection Endophthalmitis**

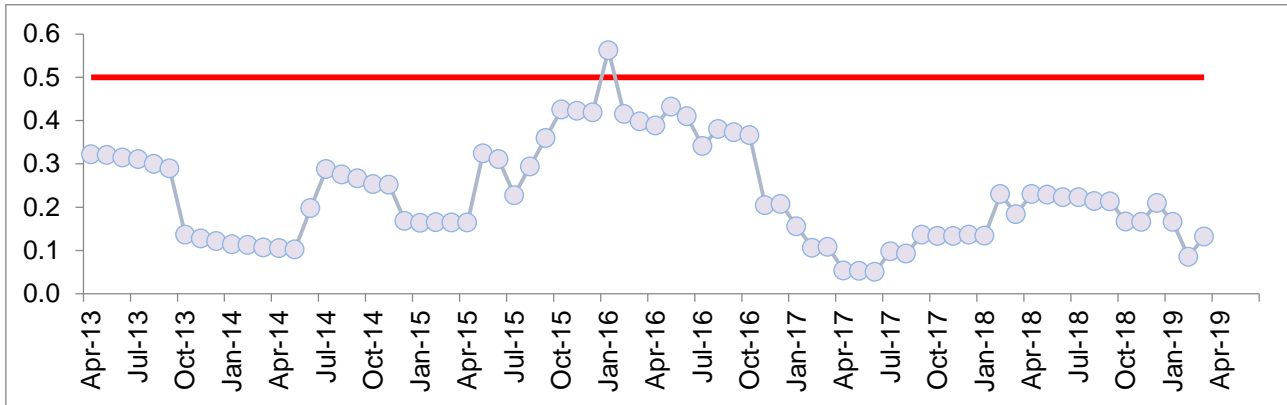
- The intravitreal injection endophthalmitis data is based on injections administered for the treatment of conditions such as age-related macular degeneration (AMD) or diabetic macular oedema (DMO). The injections consist of medicines such as Lucentis, Avastin or Eylea. This data does not include injections of Ozurdex or Triamcinolone. These injections are reported separately due to the increased complexity of Ozurdex injections and, for Triamcinolone injections, to prevent cases of sterile endophthalmitis, resulting from drug irritation, being inappropriately included in reports.
- The total number of endophthalmitis cases following intravitreal injections reported for 2018/19 was 8. This is an increase in number by 2 from last year. This equates to a rate of infection of **0.17 per 1000 procedures** which remains below the trust benchmark of 0.50 per 1000.

Table 2A: Quarterly surveillance of intravitreal Injection

Endophthalmitis - quarterly	2018/19					2017/18	2016/17
	Q1	Q2	Q3	Q4	YTD	YTD	YTD
Post Intravitreal Injections	1	4	1	2	8	6	8
Intravitreal Procedure	11496	11863	11934	11713	47006	38856	33505
Rate post injection per 1000	0.09	0.34	0.08	0.17	0.17	0.15	0.24



**Fig.2B: Rate of Endophthalmitis post Intravitreal Procedure- 6 month rolling average**



The expected rate of infection is 1:2,000 intravitreal injections or 0.5:1,000 injections.

- The performance graphs for glaucoma, vitrectomy and corneal grafts have not been included as this information is available in the performance data table.

**Procedures resulting in Endophthalmitis 2018/19**

**Table 3A: All Endophthalmitis by Procedure**

Procedure	2018/19
Cataract	9
Intravitreal Injection	8
Vitrectomy	1
Endothelial Keratoplasty	1
Revision of Trabeculectomy	2
Removal of suture	1

- The table above outlines the total number of endophthalmitis cases reported for the trust. For 2018/19 the total number was 22, this is 2 less than the preceding year, 2017/18 where there were a total of 24 cases of endophthalmitis.

**Adenovirus – possible hospital acquisition**

- Adenovirus is an infection that can cause severe viral conjunctivitis commonly involving the cornea. It is caused by different adenovirus serotypes which may be transmitted from person to person in a number of different ways, for example, contact with contaminated surfaces/equipment or contact with an infected persons tear fluid.
- The trust definition of a possible nosocomial case is a patient who has presented with an adenoviral positive swab result from day 5 to 21 days post visiting MEH for a non-infective eye condition.
- Over the past year, the trust has identified 4 cases of possible hospital acquisition. This is an decrease from the preceding year, where there were 7 cases making the rate of infection 1.2% as opposed to 1.5% as in 2017/18.



- As it is difficult to determine whether adenovirus was acquired during a visit to MEH, from 1<sup>st</sup> April 2018 the ICNs have continued to monitor the number of cases each month however this data is not presented to trust board.

**Table 4A: Quarterly surveillance of Adenovirus**

Adenovirus - quarterly	2017/18				2018/19				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Year
Positive cases	156	91	103	115	127	89	59	71	346
Possible MEH acquired	3	0	4	0	1	1	2	0	4
%possible MEH acquired	1.9%	0.0%	3.9%	0.0%	0.8%	1.1%	3.4%	0.0%	1.2%

**Routine Screening**

**Methicillin Resistant Staphylococcus Aureus (MRSA)**

- At the trust, all patients previously identified as colonised or infected with MRSA are screened for MRSA carriage.
- The DOH requires the trust to report 100% compliance with screening all patients who meet the national criteria for screening.

**MRSA screening trust data**

No. Patients Screened	No. Patients MRSA positive	% Patients Positive	% Compliance for Screening Cohort
194	5	2.58%	100%

**Carbapenemase-producing Enterobacteriaceae (CPE)**

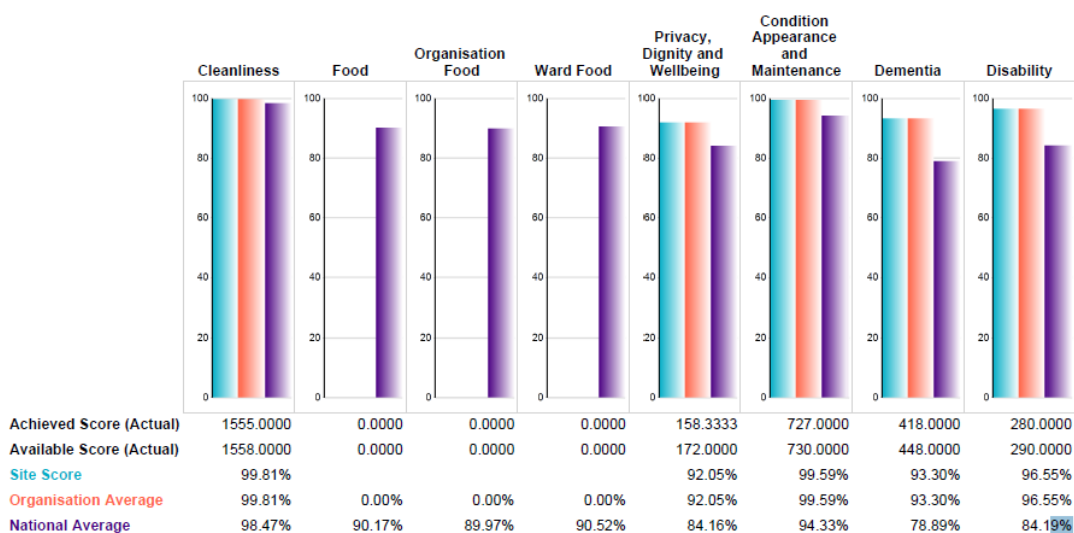
- All patients at the trust are risk assessed for the likelihood of CPE carriage and any patients identified at risk of carriage are managed in accordance with the trust CPE policy.
- The numbers of all suspected or confirmed cases of CPE are monitored by the ICN’s. The numbers of cases for each quarter are included in the ICN’s report that is presented at ICC.
- The following is the trust data for CPE YTD 2018/19.

Number of Patients Suspected of Carriage having met risk group criteria	Number of Patients with Confirmed Carriage of CPE
19	3

## External Inspections

### Patient Led Assessments of the Care Environment (PLACE)

- The ICN's were key contributors to the annual PLACE assessment undertaken at the trust in May 2018. The domains that were assessed achieved pleasing scores and showed improvements in scores from 2017 for cleanliness and dementia. This inspection does not include the satellite sites therefore it was agreed at the ICC that PLACE light is undertaken at the satellite sites by the facilities department and clinical teams.



## Antimicrobial Stewardship

### Antimicrobial prescribing and guidelines

- Moorfields antimicrobial app is the most up-to-date, shared resource for treatment of ophthalmic infections. A further four versions of the app have been published since the last financial year demonstrating our commitment to ensure the most up-to-date information is made available to healthcare professionals on the go. We are proud to report that 77% of users are clinicians, with a total of 827 active users recorded in March 2019. Quarter two and four are the busiest for downloads (>1,000 hits) possibly due to promotion of the app at various events like Trust Induction and through the NCL antimicrobial stewardship network.
- Furthermore work on guidelines for management of paediatric ophthalmic infections is underway jointly with Great Ormond Street Hospital for children. A protocol for management of paediatric bacterial endophthalmitis has been published in 2018. The protocols for managing ophthalmic infections in children will enable prompt recognition, treatment and management of conditions across Moorfields and Great Ormond Street Hospital. They will

be made available on a separate platform of Microguide app, effectively segregating adult from paediatric infection management.

- The antimicrobial pharmacist has been assisting the review of sub-specialty A&E handbooks. A successful bid has been obtained by the antimicrobial pharmacist and consultant ophthalmologist, for a Moorfields Emergency Guideline App (MEGA). This demonstrates how antimicrobial stewardship at Moorfields extends beyond guidelines generated by pharmacy.
- The CQC inspection report positively remarked on apparent evidence of antimicrobial stewardship within Moorfields Eye Hospital.

### Audit Work

- The audit programme for the financial year 2018/19 has been successfully completed, with four audits looking into service specific antimicrobial prescribing and treatment compliance issues
  - Adherence to Trust Prescribing Guidelines for Azithromycin 1.5% eye drops
  - Review of appropriateness of topical quinolone prescribing in A&E
  - Review of topical quinolone prescribing in cornea service
  - Adherence to Toxoplasmosis treatment protocols

### Involvement and contribution

- The antimicrobial pharmacist lead on a project for improving patient accessibility to emergency ophthalmic treatment: Emergency Endophthalmitis Boxes (EEBs) for rapid treatment of endophthalmitis. Diagnosis of endophthalmitis includes sampling intraocular fluid for microbiological analysis and administering antibiotics by intravitreal injection. Bacterial load in the eye can double within 30 minutes. For this reason, European guidelines recommend delivery of endophthalmitis treatment within 1 hour of presentation. Past audit and simulation at Moorfields identified that time used in gathering equipment and preparing antibiotics for emergency treatment needed to be significantly reduced. It was also apparent that standardising an endophthalmitis care package was vital in ensuring all patients treated across a large network of MEH sites have access to immediate treatment. EEBs have achieved the set goal and new response times from diagnosis to treatment achieved within the running audit are down to <20 minutes from 61 minutes.
- The project was commended as a quality and safety improvement initiative at Bayer's annual Ophthalmology Honours Awards and selected for a poster presentation at WAEH 13th annual meeting in London 2019.
- The antimicrobial pharmacist contributed to the 2018/19 flu campaign as a peer vaccinator, running pharmacy based clinics. In 2019/20 the antimicrobial pharmacist will take the ownership for reviewing and adapting the influenza PGD for use within Moorfields Eye Hospital ensuring frontline staff have easy access to the vaccine.

## Decontamination

### Monitoring and Test Results

- The Sterile Services department is accredited to government regulatory standards and holds an ISO 13485 (2016) & a Medical Device Directive (MDD 93/42 EU ECC) accreditation.
- As part of this accreditation status, the department has to undergo several monitoring and test which include: periodic protein testing of instruments compliant with the HTM01:01, Bioburden monitoring, Environmental monitoring to ISO Class 8 standards, compliant with ISO 14644-1 & ISO 14698, annual revalidation of the Clean room compliant with HTM 03 - 01 & ISO 14644-1.
- All machinery (Washer disinfectors, sterilisers etc.) have regulatory daily, weekly, quarterly and annual testing, and the steam used for the machines also undergoes periodic steam quality and condensate tests.

### SSD Productivity & Theatre Non-Conformance summary

- The average monthly productivity is about 4,400 Single Instruments ( $\pm 5\%$ ) & 9,500 Instrument Trays containing varying amounts of Instruments.
- Monthly theatre non-conformance is 0.05%. This represents a considerable level of quality control and theatre acceptance of the quality of the products from the department. The department however will work continuously towards further reduction in the levels of the non-conformances.

### Surveillance & Accreditation

- The Department has yearly surveillance audits from government regulatory External audit firm SGS, for the following scope of Certification Standards “ISO 13485:2016 – Medical Device Certification & the Directive 93/42/EEC – Medical Device Directive”.
- The department performs very well in these audits and any compliance issues are reviewed, and closed-off appropriately.

#### Quality Management Systems

The department operates a robust Quality Management System (QMS) which comprises:

- SSD Quality Manual incorporating the Quality Policy
- SSD Technical Assessment compliant with the requirements of the MDD 93/42 EEC
- Risk Assessment compliant with ISO 14971 - Risk Management / Analysis
- Various SSD Procedures and SOP's compliant with:
  - *BSEN980 - Graphical Symbols for use in labelling Medical Devices*
  - *ISO 11607 - Packaging for terminally sterilised Medical Devices*
  - *EN 868-1: Packaging Validation; HTM 01-01: Hospital Technical Memorandum: Decontamination of surgical instruments*
  - *GMP: Good Manufacturing Practices*
  - *BS EN 1041: Information that is supplied by the manufacturer of medical devices*



- *BS EN ISO 17664: Sterilisation of Medical Devices*
- *BS 6254: Specification for Crepe Sterilisation Paper for Medical Devices;*
- *BS 6255: Specification for Plain Sterilisation Paper for Medical Devices*
- *BS 6256 & BS 6257: Specification for Paper, pouches, bags for steam sterilisation*
- *BS 6871: Specification for Heat Sealable Pouches*
- *BS 867: Non-Biological systems in sterilising medical devices (use of autoclave tapes, Class B indicator, Bowie Dick)*
- *ISO 14644-1: Cleanroom Classification*
- *ISO 14937: Sterilisation of Healthcare Products*

The departmental QMS is written to comply with MEH standards as well as regulatory standards and it is regularly reviewed for compliance and to ensure it is up to date with current regulatory requirements.

### Training

- Training and re-training programmes are being implemented and documented in staff files and the department’s Training Matrix.

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## Infection Control Policy

### Policy

During this year the ICNs have continued to review and update policies, guidelines and standard operating procedures to ensure staff are provided with the most up to date information to enable best evidence based practice to be delivered to patients.

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## Infection Control Audit

### Audit

Compliance with key infection control policies is monitored through policy and practice audits which provide evidence of staff performance and knowledge.

### Policy Audit

The trust performance of policy audit compliance is as follows:

Green Compliance	Amber Compliance	Red Compliance
13	1	0

- In addition to this, the trust overall compliance scores for departmental monthly audits of hand hygiene and cleanliness were green.
- Below is the scoring system used to score the level of compliance as red, amber or green. This scoring system is used for all infection control audits.



Overall Score	Compliance Level	Rag Rating
85% or above	Compliant	Green
76% - 84%	Partial compliance	Amber
75% or below	Minimal compliance	Red

### Environment Audits

Department audits are undertaken by the ICN's annually unless otherwise indicated.

Green Compliance	Amber Compliance	Red Compliance
22	4	0

- This year 26 clinical areas including 11 theatre sites containing 21 operating facilities, 9 injection sites comprising of 17 individual injection rooms, 1 minor ops suite, 4 wards and the Accident and Emergency Department were audited.
- Theatres at St Georges Hospital and Duke Elder Ward moved to St Anthony's Hospital, Cheam in January 2018 for major refurbishment works to take place of the theatres and the ward at St Georges Hospital. The intravitreal injection facility moved to City Road.

### Infection Control Risk Register

The IC risk register was reviewed at the ICC twice during the year and was reviewed by the ICT quarterly. The risks identified included a change in the use of a clinical premises from overnight stay to longer length of stay for patients and recognised that there is no capital planning procedural document which outlines the process for full stakeholder sign off

### Hand Hygiene Campaign

The ICNs delivered a trust wide hand hygiene campaign from September to December.

#### The aim of the campaign was to:

Review staff compliance with hand hygiene practices which included compliance with 'Bare below the elbow', review the availability of hand hygiene facilities, assess staff knowledge and awareness on the trust hand hygiene policy, refresh hand hygiene posters for both patients and staff, review hand hygiene products in theatres used for surgical scrubbing

As part of the campaign the ICNs reviewed the hand hygiene products used for undertaking a surgical scrub and a waterless solution for undertaking a surgical scrub was introduced in all the theatres and intravitreal injection rooms at the trust.

#### NHS Improvement National Policy and Guidance (NPG) Consensus Group

An ICN was a member of the national policy and guidance consensus group and was actively involved in the development of a national hand hygiene and personal protective equipment policy which was published by NHS England and NHS Improvement in March 2019.

## International Visits

### Visit to UAE

In April 2018 two ICNs visited Moorfields Dubai and Abu Dhabi. The aim of the visit was to review the facilities and resources and gain an insight in the infection control practices and procedures in place. Audits were undertaken in the operating theatre and outpatient departments. Feedback was provided verbally which was followed up with comprehensive reports. The visit proved to very beneficial for the teams and assisted in building a good networking system.

### Chile

A small group of experts travelled to Santiago, Chile, in April to provide a knowledge transfer with the Pasteur network of ophthalmology. The infection control matron participated in the organisational review and developed an infection control programme as part of a larger quality governance framework. This assisted the Pasteur clinic to strengthen their quality objectives and obtain national accreditation.

### Presenting at WAEH in Michigan, US

In June the infection control matron took part in the international World Association of Eye Hospitals conference at the Kellogg Eye Centre in Michigan. Presenting on the surveillance work that had been developed and lessons learnt following a rare cluster of cases experienced at the trust a year previous, the talk was received well and a commitment to work collaboratively on endophthalmitis benchmarks in the future was agreed.

## Matters of the Estate

### Water Safety and Ventilation Management Group

- A water safety and ventilation management group meet quarterly to discuss issues relating to the operational management of water and ventilation systems.
- This group reports quarterly via the estates department to the Infection Control Committee any exceptions to water and ventilation management.

### Water Safety

Statutory water testing at the trust is undertaken by an independent company and the Estates Team is notified of the findings including details of control measures required. The estates team inform the infection control team of routine samples that detected legionella. The ICNs liaise with the clinical staff in the area(s) as required and provide advice on any additional measures that need to be implemented.

### Theatre Ventilation

All theatres have an annual ventilation inspection undertaken by independent companies to ensure that the theatre facilities meet the required minimum standards per HTM guidance and are safe for use. The estates team receive all such inspection reports including host sites. Reports are





reviewed by estates, infection control nurses and the infection control doctor and any remedial work required is followed up by the estates team.

### **Refurbishment/Capital Planning**

This year the ICN's have had input into plans before, during and after completion of works on various sites where refurbishments have been undertaken to ensure that infection control standards were met.

These have included:

- refurbishment and new builds of theatres and Duke Elder Ward at St Georges Hospital
- refurbishment and development of facilities for private patients, 4<sup>th</sup> floor City Road
- refurbishment of the pharmacy department at St Ann's Hospital
- renovation works in the clinical research unit laboratory and dirty utility at City Road
- refurbishment and development of storage facilities – main theatre corridor
- development of facilities of a staff room and patient shower/toilet facilities on the Observation Ward

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## **Facilities - Cleaning**

- A clean environment is crucial for maintaining patient safety. A cleanliness monitoring meeting is held quarterly to discuss issues relating to cleanliness, waste and linen at the trust.
- The meeting is attended by infection control, estates, ISS facilities, SSD and matrons. A summary report is provided by each department of their activity for the quarter and any concern/questions are discussed at the meeting.
- Cleanliness at MEH is monitored through monthly cleaning audits undertaken by link practitioners, environmental audits undertaken by the ICNs and monthly walkabouts by facilities, estates, ICNs and matrons.
- A summary from this meeting highlighting any areas that require escalation is presented at the quarterly Infection Control Committee.

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## **CQC Unannounced Inspection**

An unannounced CQC inspection was undertaken at the trust in November 2018. The inspection reflected on high standards of infection control across all sites visited by the inspectors. There were no infection control concerns highlighted in the final report which required addressing.

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## **Education and Training**



### **Mandatory Training**

- The ICN's have delivered face to face training sessions to all staff groups at corporate induction and as part of the mandatory training programme. In addition to face to face training both clinical and non-clinical staff have the facility to do the training online using e-learning packages.
- The trust overall compliance for clinical staff was **91%** and **96%** for non-clinical staff achieving above the trust target of 80%.

### **Infection Control Link Practitioners**

- The trust has link practitioners in clinical areas across all sites. Link practitioners are a key resource for disseminating infection control information. Two workshops were held during year and were well attended by staff from different departments across the trust. Specific sessions and training was provided which included:
  - Administration of intravitreal Injections
  - The environment as a vector for infection
  - Hand Hygiene- Feedback from hand hygiene campaign
  - Influenza
- The ICN's also used this opportunity to provide an update on new published national guidelines and changes to current practices and procedures in the trust.

### **Measles Awareness Sessions**

- As a result of an increase in the number of measles cases seen in the London area during the year, NHS improvement sent a letter to all trusts in July with recommendations. As a result the ICNs delivered sessions on measles to staff in the Accident and Emergency Departments and provided posters for staff and patients.

### **The Monthly Bug Brief**

This infection control newsletter has covered a variety of information this year including compliance scores and key findings from audits, new and revised policies, upcoming infection control study days, conferences and any new national guidelines.

### **Infection Control Liaison Officer Clinical from Singapore**

An ophthalmic nurse who provides an infection control service in an ophthalmic hospital spread across multiple sites in Singapore spent two weeks with the ICNs in November 2018. During this time the nurse observed practices in the operating theatres and nurse led clinics and had the opportunity to visit some satellite sites. This was an opportunity for the ICNs to share knowledge and experiences.

### **Project Search Intern**

A project search intern spent 3 months with the ICNs. Objectives were set by the ICNs with the intern to help develop skills for future employment. During this period the intern accompanied the ICNs during audits and undertook a range of administrative roles under the supervision of the ICNs.

### **Infection Control Web Page**

The trust IC web page has been kept up to date by the IC administrator. IC information available on this page includes:

All IC leaflets, IC newsletter, information on management of sharps/splash injury, any new IC information and link to all IC policies

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## **Conclusion**

2018/19 has overall been a pleasing year for the ICT. This report demonstrates the achievements and continuous improvements in infection control that have been made which have contributed to maintaining patient safety. An expansion of benchmarks for further ophthalmic procedures has meant that there is increased surveillance and reporting which has assisted the trust in monitoring performance in individual services.

The report provides assurance of processes in place to ensure that the trust meets the requirements of the Health and Social Care Act 2008 (amended 2015): Code of Practice for the NHS on the prevention and control of healthcare related guidance.

The completion of the ICT audit programme and alert organism surveillance is a proven method of achieving high standards across the trust and it is the ICN's implementation of this that ensures assurance processes are focused on patient, visitor and staff safety as a priority.

Looking forward to 2019/20, prevention of healthcare associated infections will remain a priority for the infection control team at the trust. The ICNs will continue to work collaboratively with other stakeholders at the trust and work to a robust annual programme of work to help ensure that a high standard of infection control service continues at the trust. The IC service will be developing an IC strategy which will focus on the key objectives for the ICT.



## Appendix 1: Explanation of Commonly Used Terms

- Healthcare-associated infection - Infections resulting from medical care or treatment in hospital (in or out-patient), nursing homes, or even the patient's own home. Previously known as 'hospital acquired infection' or 'nosocomial infection' the current term reflects the fact that a great deal of healthcare is now performed outside the hospital setting. Healthcare associated infection (HCAI) can affect any part of the body, including the urinary system (urinary tract infection), the lungs (pneumonia or respiratory tract infection), the skin, surgical wounds (surgical site infection), the digestive (gastrointestinal) system and even the bloodstream (bacteraemia).
- MRSA- MRSA is a type of bacterial infection that is resistant to a number of widely used antibiotics. This means it can be more difficult to treat than other bacterial infections. The full name of MRSA is methicillin-resistant staphylococcus aureus.
- CPE - carbapenemase-producing enterobacteriaceae (CPE) are gram-negative bacteria that are resistant to the carbapenem class of antibiotics, considered the drugs of last resort for such infections.
- DMO - diabetic macular oedema is where blood vessels leak fluid into the retina.
- AMD - Age related Macular degeneration is the leading cause of severe vision loss in people over age 60. It occurs when the small central portion of the retina, known as the macula, deteriorates. The retina is the light-sensing nerve tissue at the back of the eye.
- Surveillance - Refers to the collection of data on healthcare associated infections occurring in a defined subgroup, such as those on a particular ward, those undergoing a particular procedure or those acquiring a particular infection.
- Clostridium difficile Infection (CDI): diarrhoea or colitis cause by infection with the Bacterium Clostridium difficile and detected by a positive test for Clostridium difficile Toxin.
- Bacteraemia- The presence of bacteria in the blood. The term 'fungaemia' is used if the micro-organisms in the blood are fungi (e.g. yeasts) rather than bacteria
- Bloodstream infection - The presence of micro-organisms in the blood with signs of infection. This can be 'primary' i.e. inoculated directly into the bloodstream e.g. via an IV line or 'secondary' spread to the bloodstream from an original focus somewhere in the body e.g. urinary tract, etc.
- MRSA Bacteraemia The presence of Methicillin resistance Staphylococcus aureus bacteria in the blood stream.
- MSSA Bacteraemia The presence of Methicillin sensitive Staphylococcus aureus bacteria in the blood stream.
- E.coli Bacteraemia The presence of E.coli bacteria in the blood stream.

- Intravitreal is a route of administration of a drug or other substance, in which the substance is delivered into the eye. "Intravitreal" literally means "inside the eye".
- Screening - Process through which carriers of a trait may be identified within a population.
- Rate - amount in relation to standard figure: the amount, frequency of something expressed as a proportion of a larger figure or in relation to a whole.
- Coliforms - describes rod-shaped bacteria that are normally found in the colons of humans and animals and become a serious contaminant when found in the food or water supply.
- *Pseudomonas aeruginosa* - is a common bacterium that can cause disease in animals, including humans. It is citrate, catalase, and oxidase positive. It is found in soil, water, skin flora, and most man-made environments throughout the world.