

# GREAT ORMOND STREET HOSPITAL FOR CHILDREN NHS FOUNDATION TRUST

## INFECTION PREVENTION AND CONTROL ANNUAL REPORT

April 12 - March 13

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### **Executive summary: Activity in 2012/13**

**Overview of infection prevention and control activities in the Trust during 2012-13**  
(numbers related to sections in full report)

#### **2) Infection control arrangements**

Infection Control Team:

Dr John Hartley continues as DIPC (since Aug 2009) and ICD (0.3 wte); other Consultant Microbiologist time allocated for IPC, 0.3 wte.

Deirdre Malone continues as Lead Nurse Infection Prevention and Control..

One full time Deputy Lead Nurse and 0.4 wte clinical scientist

Administrative support - Administrator and Data Analyst appointed September 2011.

Part time (0.2 wte) antibiotic pharmacist support was present through the year.

Surgical site infection prevention and surveillance (SSIP&S) team, funded for three years, started November 2009, fully disbanded Jan 2013.

Practice Educator IPC – funded through Transformation process – in post Nov 2011 to July 2012, following resignation. Reappointment to the post not supported by Transformation Team.

IPC team have been unable to undertake all planned activities due to this staff restraint.

Executive lead: Chief Nurse and Families Champion

Infection Control Committee: the committee meet bi-monthly

Divisional Directorate local IPC structure:

A key component of Trust policy is the delegation to and acceptance of responsibility by all clinical staff, starting with formation of Divisional IPC groups and plans. All Divisions, except MDTs, had regular IPC meetings during this financial year. MDTs have subsequently commenced. Surgery and Cardiorespiratory IPC groups have been very active.

#### **3) DIPC reports to trust board**

Apr 2012 - Regular DIPC report to Board  
Apr 2012 - Assurance framework on HCAI – update presented to Clinical Governance Committee

July 2012 – Presentation of 2012 Annual report to Board

Nov 2012 – Regular DIPC report to Board

April 2013 – Regular DIPC report to Board

#### **4) Budget allocation to infection control activities**

Main funding for IPC Team lies with Department of Microbiology, Virology and Infection Prevention and Control.

Full time funding had been made available through the Transformation Process, to provide a second experienced IPC practitioner (Clinical Nurse Specialist/Practice Educator) to enhance the Trust IPC activity towards the strategic goal of no avoidable infections. This

post was filled 29/11/2011 to 13/07/2012 but became vacant and funding into this post has been withheld by Transformation.

SSIP&S team – this was supported by Special trustees until end of project. Responsibility for surveillance was handed to the Divisions, but this has been slow to be established.

Excellent Trust support is provided for emergency supplies of personal protective equipment as required.

Extensive routine and specialist laboratory support was provided by the Department of Microbiology/Virology and Infection Prevention and Control, GOSH

## 5) HCAI Statistics

GOSH complied with all mandatory HCAI surveillance schemes as well as completing a number of specific local surveillance programmes. This report does not include all local Speciality surveillance covering infection, which may be in Specialty reports.

### 5a Mandatory reporting

**MRSA bacteraemia** - total Trust apportioned cases during year = 3  
(National target = 0) (One line related, one spontaneous, one contaminant)

**Glycopeptide resistant enterococcal bacteraemia** – total during year = 5 (No target)

***Clostridium difficile*** - Trust apportioned cases in national surveillance scheme (cases aged greater than 1 and in for 3 or more days when tested) = 7.

National target for 2012/13 was less than or equal to 8.

**Orthopaedic SSI:** The trust does not carry out the procedures with mandatory nationally surveillance. (Surveillance is performed in other areas – see GOSH surgery figures)

### **MSSA - *S. aureus* (methicillin sensitive) bacteraemia**

Episodes of MSSA bacteraemia = 29 (No National target in 2012/13)

13 detected on admission/less than 48 hours; 16 on set after 48 hours

(11 central line related, 2 peripheral line, 1 spontaneous and 2 contaminants)

### ***E. coli* bacteraemia**

Episodes of *E. coli* bacteraemia = 19 (No National target)

### 5b GOSH specific (non-mandatory) HCAI statistics

#### **Central Venous Line related bacteraemia acquired at GOSH**

= 2.1 per 1000 line days.

This equates to a slight increase year on year (episodes per 1000 line days 07/08 – 4.4; 08/09 - 3.7; 09/10 3.2; 10/11 2.6; 11/12 2.0) however we continue to aim to reduce this further.

#### **Surgical site infection prevention and surveillance**

The SSI Surveillance team data

The SSIS team performed inpatient and post discharge surveillance in line with the Health Protection Agency protocol. Surveillance was performed in orthopaedic spinal implant, cardiac (open and closed heart), craniofacial, neurosurgery, thoracic surgery, general and neonatal surgery, orthopaedic '8 plates' and plastic surgery patients for periods between 3 and 12 months.

(This data may not be directly comparable with other Trusts as surveillance and case mix varies.)

1554 procedures were surveyed – ‘all procedure’ results for deep and organ/space infection show rates of 0.5 and 1.2%. With the inclusion of superficial (2%) and patient reported infections (2.8%) the overall infection rate was 6.4%.

Specialty surveillance data

- Urology continued specialty based SSI surveillance of all procedures and detected the same low number of cases as last year (4 in a 1008 procedures compared to 6 in previous year).

- Cochlear implant

Local service report 103 surgeries with no infections, although one implant removed for infection possible not related to original surgery.

SSI Root cause analysis

Divisions have not yet established a robust system for investigating and reporting all serious infections.

### **Other GOSH surveillance**

#### **Viral infections acquired while in hospital**

There was an increase in the number of episodes of viral respiratory (104 cases, 15 on set in hospital) and viral gastroenteritis (151 cases, 79 onset in hospital) infections present in children when admitted or developed while in hospital. This had a greater impact on patient flow than last year. One ward was closed.

These infections transmit readily between patients, staff, parents and visitors. Continuous application of standard infection prevention and control precautions and high levels of cleanliness are required to maintain control.

### **Antimicrobial resistance**

#### **MRSA**

123 newly colonised or infected children were detected on admission in 2012, with 4 probably or possible acquisitions within the trust in (compared to 9 previous year).

There were no MRSA outbreaks. This was a reduction from 156 in 2011.

#### **Multiple resistant ‘gram negative’ organism colonisation or infection**

(E coli, Pseudomonas and other related organisms as defined in admission screening policy)

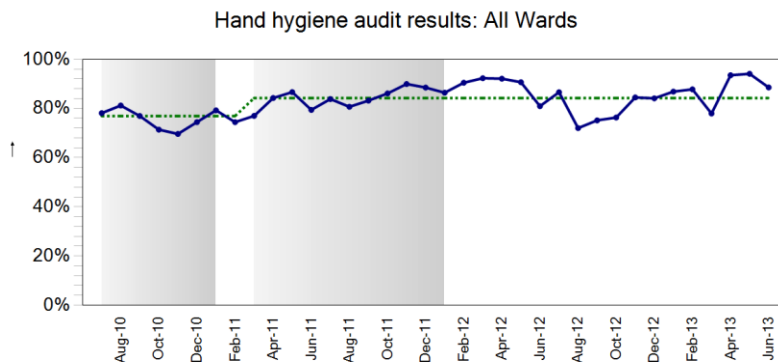
Screening/testing in 2012 revealed 183 first detections, of which 137 definitely came in colonised and 46 were either cross infection or detected as result of antibiotic selection with previous negative or not screened. This is similar to last year (180 detections in 2011, up from 124 first detections in 2010) and is likely to reflect the continuing national and international increase in antimicrobial resistant organisms.

#### **Serious incidents (SI) involving infection**

In 2012/13 there were no SIs principally on HCAI.

### **6) Hand Hygiene, Aseptic Protocols and care bundles (Saving Lives High Impact Interventions and other relevant bundles e.g. WHO, NICE)**

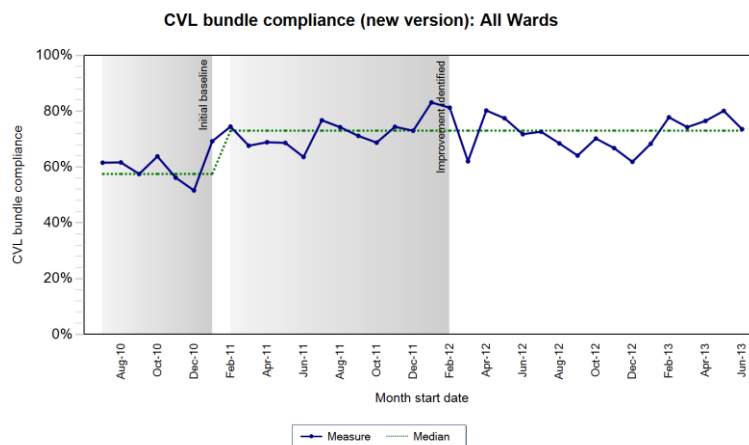
The practice educators are continuing to provide training on hand hygiene for staff within their Divisions. The IPC team provides induction IPC to all groups of staff but face to face annual update has been curtailed by the Trust. Each division has now incorporated infection prevention & control into their divisional plans and this also includes hand hygiene.



The time point for June 2013 represents 2503 satisfactory observations out of 2632 performed, giving a rate of 95%.

The national staff survey again reported lower than desired satisfaction with availability of facilities for all staff at all time. An in house survey confirmed that this mainly involved staff working in non clinical areas. Facilities are working on ensuring hand cleaning material is always available, but local areas need to take some responsibility on requesting replacement when needed..

CVL care bundle – each ward / department conducts monthly compliance audits with the CVL care bundle. This data is displayed on the Trusts transformation dashboard and wards / departments are encouraged to print off and display their own data, this should also be discussed with staff at their ward meetings.



Time point for June 2013 represents 265 satisfactory observations out of 302 performed, with a rate of 87%.

Divisions need to ensure improvement in these areas. Additional staff in the IPC Team would be able to assist with this process.

## **7) Corporate Facilities**

### **Decontamination**

The Trusts Decontamination services maintained accreditation in all three aspects: Sterile Services, Endoscopy and Medical Equipment to ISN standards. However, off site sterilisation has commenced due to cessation of local capacity and full service will move off site Sept 1st 2013.

Progress has been made towards full compliance with the vCJD control guidance as approval was given to purchase new neurosurgical instruments. Assurance must be given by any external provider that the integrity of these instruments will be maintained.

### **Facilities**

Services remain outsourced to MITIE. A number of concerns were raised during the year regarding the standard of cleanliness by the senior nursing team, and as a result MITIE have implemented an internal transformation team to rectify these.

## **8) Estates**

A rolling programme of validation of critical ventilation systems has commenced. All Theatres are verified, however, the programme has not yet covered all areas and there may still be hidden risks.

Legionella in domestic water supplies in all buildings is now monitored through a single service contract. No significant legionella counts were detected in high risk clinical areas. Remedial works have been carried out in some areas in the Frontage Building.

The MSCB was handed over to Estates in December 2011. The low temperature copper/silver system has been implemented for legionella control, no legionella has been detected, however, modification of the water supply system is still required to ensure the active agents are delivered to all outlets.

An initial response to the DoH alert on *Pseudomonas aeruginosa* has taken place, with satisfactory results from screening of the ITU's. Isolated detections have occurred but not linked to any patient isolates. Implementation of the full programme will require funding and a full business case is under way.

## **9) Audit**

A regular IPC audit programme is followed throughout the year. The audits are undertaken by the link practitioners on their respective wards/departments. Audit data is displayed on the dashboards, discussed at Board and Unit meetings.

In addition to auditing hand hygiene compliance and compliance with the CVL care bundle (see graphs above) the following areas are covered as part of the 'Saving Lives' programme:

- Peripheral line care bundle (insertion and maintenance)
- Urinary catheter care bundle (insertion and maintenance) audited annually
- Renal dialysis care bundle audited annually
- Isolation precautions audited annually

Antibiotic prescribing – Antimicrobial stewardship committee agreed and commenced audit of three performance indicators.

Independent IPC Team audits and monitoring of practice have not been carried out as intended due to insufficient staff time.

## **10) Occupational Health**

The Staff immunisation policy was updated. Influenza immunisation was provided.

### **11) Targets and outcomes**

See HCAI statistics and Hand hygiene (sections 5 and 6)

CQUIN targets linked to IPC (CVC infections, SSI and blood stream infection audit) were mostly met.

Completion of an RCA for all appropriate *S. aureus* bacteraemia was achieved.

### **12) Training activities**

A short session is provided for all clinical and nonclinical staff on induction in IP&C; antimicrobial prescribing is provided for medical induction and annual update.

Face to face annual IPC update has been curtailed. Local induction should provide additional training.

Roll out of local training and competency assessment in aseptic non-touch technique and line insertion protocols has not been achieved Trustwide. Further work is required by Training and Education regarding assurance of medical competencies.

The annual infection control link network training was held in Oct 2012, and 14 people attended. Further training sessions were held as part of the bi-monthly infection control link network meetings.