

Director of Infection Prevention and Control

Annual Report
2008/9

**Dr Julie Andrews, Consultant Microbiologist and
Director of Infection Prevention and Control**

(1st October 2008 - 30th September 2009)

1.0 Executive Summary and Overview

1.1 Organisation

The Whittington Hospital NHS Trust takes the prevention and control of infection very seriously. It is a key corporate objective to deliver clean, safe care to all patients. Infection prevention and control is everyone's' business, regardless of discipline or grade.

1.2 Activities

The activities of the Infection Prevention and Control team (IPCT) and the wider community have continued to focus on further reduction in incidence of healthcare associated infections (HCAI), particularly MRSA bacteraemia, *Clostridium difficile* diarrhoea and surgical site infections. Ensuring that all our staff have the necessary knowledge and skills to achieve this reduction in HCAI incidence has also been a key activity.

The trust has worked closely with the Department of Health's (DoH) MRSA Improvement Support Team (IST). The MRSA IST were invited by the Chief Executive to visit the trust in September 2008 to review practice and advise on additional measures to reduce the rate of MRSA bacteraemia within the trust. The trust is now below trajectory for MRSA bacteraemia (as of 1st July 2009) resulting in additional support from the DoH being stepped down recently.

With the arrival of a novel Influenza strain H1:N1 (Mexican or swine flu) in the UK in April 2009, the IPCT have been key members of the Swine flu co-ordinating committee. The remit of this committee is to ensure the organisation has developed a workable and robust crisis management plan to deal with the rising numbers of patients likely to be seen in the expected second phase of the H1:N1 pandemic in winter 2009. The plan encompasses areas such as equipment, training, placement of patients, treatment, vaccination strategies and business continuity.

In collaboration with the Microbiology team, the IPCT review ward patients with infection daily. Outpatients and community patients are discussed with relevant healthcare workers directly or via telephone or email. Rapid diagnosis of infection, prudent antimicrobial prescribing and reduction in transmission of infection are the focus themes of management.

1.3 Infection Prevention and Control (IPC) Action Plan

The main priority of the Infection prevention and control Action Plan for 2008/09 (see Appendix A) was to ensure the findings and recommendations following the MRSA IST visits and Healthcare Commission inspections were fully implemented. This included improving feedback of audit work, enhancing the HCAI root cause analysis (RCA) investigations and sharing of learning from these, and ensuring key aspects of Saving Lives initiatives were more embedded.

The current 2009/10 IPC plan is shown in Appendix B. The 2009/10 IPC plan focuses on zero tolerance to MRSA bacteraemia, increased MRSA screening and suppression, enhanced clinical ownership and introduction of ward based Infection prevention and

control performance presented as a IPC dashboard. Progress of the actions contained within the 2009/10 plan is monitored more closely by the development of a small IPC implementation group consisting of the Director of Infection prevention and control (DIPC) and three senior nurses.

1.4 Progress with “Winning Ways”

“Winning Ways” (DoH, 2003) sets out best practice to reduce HCAI in England and Wales. More recent guidance, such as Saving Lives (DoH, 2007) has added to this; they are key documents in influencing IPC aims and work agenda. They are reflected in the IPC action plan, the daily working of the IPCT and the audits undertaken by the senior nurses in the VLT, the Infection control link practitioners and the IPCT.

2.0 Infection Prevention and Control Arrangements

2.1 Infection Prevention and Control Team

At the Whittington Hospital the IPC agenda is led by the DIPC, who reports directly to the CEO and the Trust Board. The Director of nursing & clinical development and the Medical Director also have key roles in ensuring that high standards of clinical care are delivered to our patients, and they support the DIPC in her role.

The IPCT is managed by the DIPC, and during 2008–09 comprised of a matron in Infection prevention and control, two specialist nurses, one antimicrobial pharmacist, a surveillance co-ordinator and a support officer. The IPCT also work closely with the Microbiology team, facilities staff, bed management team, practice development team and Health and Work centre.

A team of link practitioners, who receive additional training in infection prevention and control and regularly liaise with the IPCT, also support ward and clinic staff.

During 2007, the Director of nursing & clinical development established the Visible Leadership team (VLT). It is led by the Director of nursing & clinical development and comprises the Matrons and Assistant Directors of nursing, who work on the wards in uniform every Monday. A major focus for this team is educating staff and auditing practice around infection control guidance, including hand hygiene, peripheral cannula care, urinary catheter care, environment cleaning standards and isolation practice. The VLT work in collaboration with the IPCT to ensure Saving lives audits are covered regularly and findings are feedback. The VLT received highly commended in the Nursing times Infection control awards 2008.

The IPCT are supported by the work of a full CPA accredited microbiology laboratory based at the Whittington NHS Trust. The laboratory dealt with 192,000 specimens this year (a 8.4% increase since 2007/8).

2.2 Infection Control Committee

The Infection Control Committee is chaired by the chief executive and meets every two months. It reports to the Clinical Governance Committee, which receives regular

updates on progress against the infection control targets and monitors progress with both the IPC action plan and the MRSA bacteraemia RCA action plan.

Membership includes key directors, directorate representatives, the IPCT, Microbiology team, Health Protection Agency representative, Occupational health consultant and an Islington PCT representative.

2.3 Reporting Line to the Trust Board

The ICC reported directly to the Trust Board until the end of 2007, when a review of the Trust Board structures was undertaken. The current reporting line of the ICC is below:



The DIPC reports directly to the CEO and Trust Board.

2.4 Links to Drugs and Therapeutics Committee

The drugs & therapeutics committee (DTC) and ICC both report to the CGC, which is co-chaired by the Medical Director and the Director of nursing & clinical development. Continuity is assured as the DIPC and head of pharmacy are both members of the CGC and provide regular updates from their areas.

An antimicrobial steering group (ASG), chaired by the DIPC, was set in April 2009 and meets quarterly. The ASG reviews antimicrobial policies, expenditure and audits and plans further work as required. All directorates are represented and a pharmacist from Islington PCT attends. The ASG reports directly to the DTC and ICC.

2.5 Links to Risk Management

The IPCT have a close working relationship with the risk management team, which is headed by the Assistant Director of nursing (risk management). She is also a member of the CGC and is the RCA HCAI lead for the Trust.

3.0 DIPC reporting to Trust Board

The trust's performance against the targets for MRSA bacteraemia and *Clostridium difficile* and MRSA screening are reported to the Trust Board every month, as part of the trust's performance dashboard report.

The DIPC also provides detailed monthly infection control updates to every Trust Board meeting. Included as standard are the trust's performance for the previous month against the national targets for MRSA bacteraemia and *Clostridium difficile*,

work being planned and undertaken to improve performance, including root cause analysis reports, and results of the IPC audits. Where applicable, reports are also provided on any infection outbreaks and from external visits and resultant actions planned, for example following the visits from the MRSA IST or Healthcare commission inspections.

All Trust Board decisions are recorded in the minutes and then taken to CGC and ICC for further action.

4.0 Budget allocation for Infection Prevention and control activities

4.1 Staff

The DIPC is a Consultant Microbiologist, who has one programmed activity designated for this role.

The infection prevention and control team had the following staff in 2008/9:

1 wte matron (band 8a) appointed in February 2008

1 wte antimicrobial pharmacist (band 8a)

2 wte infection control nurses (band 7)

1 wte surveillance co-ordinator (band 5, new post from January 2009)

1 wte support officer (band 4 – temporary position for 1 year fixed term, for review April 2010)

The allocated budget for infection control in 2008/9 consisted of £286,341 pay and £2,208 non-pay. This excludes the pay of the DIPC whose role is funded from within the microbiology budget. There was a limited allocated training component (£50) for the 6 non-medical members of the IPCT within the annual IC budget.

4.2 Support

The IPCT have support from a designated analyst within the IM&T department, who produces their weekly monitoring graphs, and undertakes other data analysis e.g. MRSA screening as requested. The weekly monitoring IC flash report from 30th September 2009 is shown as appendix D.

4.3 Training

The trust does not have a separate budget for consumables and other overheads required to deliver infection prevention and control training to all staff.

5.0 IPC training

The IPCT provide a wide range of training as part of their role, both through individual IC practitioner study days and as part of the trust's regular induction and mandatory refresher training days. A new programme of mandatory training for non-clinical staff commenced in September 2009 and a session is delivered by the IPCT.

Training on various infection related scenario's using Objective structured clinical examination (OSCE) type assessment was delivered by the IPCT and VLT in 2008/9 to various clinical staff groups in the ward environment. Staff were given individual scores and feedback. OSCE scenario's that were devised and delivered in 2008/9 included MRSA, diarrhoea/vomiting, management of pulmonary tuberculosis and influenza.

Training is also provided for junior doctors by the DIPC through their regular education programmes, with a focus on prescribing antimicrobials, managing common infection scenario's and aseptic technique.

The antimicrobial pharmacist and DIPC provide training support for ward pharmacists and pharmacy students. The DIPC delivers departmental IPC training to individual departments 1-2 times a month and gives IPC updates to the full Consultant body formally twice a year.

The VLT, the IPCT and the trust's practice development team gave additional refresher training on hand hygiene and sharps management to over 1,600 staff between January and March 2009.

Training and competency assessment on the taking of blood cultures was delivered to over 500 members of staff from 30th April 2009 based on Trust policy. The training was delivered by the IPCT in collaboration with the corporate practice development nurse and senior haematology-oncology nurses. This training programme has been added to the mandatory cannulation study day and junior doctors practical procedures course to ensure it is continued. The undergraduate clinical skills centre has adopted this training programme.

Foundation year (FY) practical procedures competency assessment course ran for the first time this year for new FY doctors in August 2009. The IPCT and corporate practice development nurse delivered 60% of the sessions including peripheral cannulation, urinary catheter insertion and taking of blood cultures.

With the arrival of influenza strain H1:N1 the IPCT along with the practice development team have commenced a training programme to ensure all relevant staff are aware of required personal protective equipment including how to correctly fit FFP3 respirators. Training programme has also included up to date information on treatment and vaccination.

6.0 HCAI rates and other IPC surveillance

6.1 Results of Mandatory HCAI Reporting

- **MRSA Bacteraemia:** For the period April 1st 2008 until 31st March 2009 there were 23 episodes against an agreed target of 15. 10 of these episodes were diagnosed within 48 hours of admission and were investigated by the relevant Primary Care Trust. 13 episodes were diagnosed after 48 hours of admission and these were all fully investigated using RCA process and wide sharing of learning. Each RCA and actions identified are kept as an ongoing RCA action plan discussed at CGC and ICC.

For the period April 1st 2009 until 30th September 2009 there have been 4 MRSA bacteraemia episodes diagnosed, three pre-48 hour episodes and 1 post 48 hour. This is against a target to date of 10. Since 1st July 2009 the Trust has been below trajectory for the MRSA bacteraemia target. At the time of writing there had been no MRSA bacteraemia episodes diagnosed in the Trust since 20th April 2009 (200 days).

- **GRE Bacteraemia:** The trust reported 2 cases of glycopeptide resistant enterococci (GRE) bacteraemia in the period 2008/9.
- ***Clostridium difficile:*** From 1st April 2008 until March 31st 2009 the trust reported 65 cases of post 48 hours *C. difficile* against an Islington PCT set target of 124.

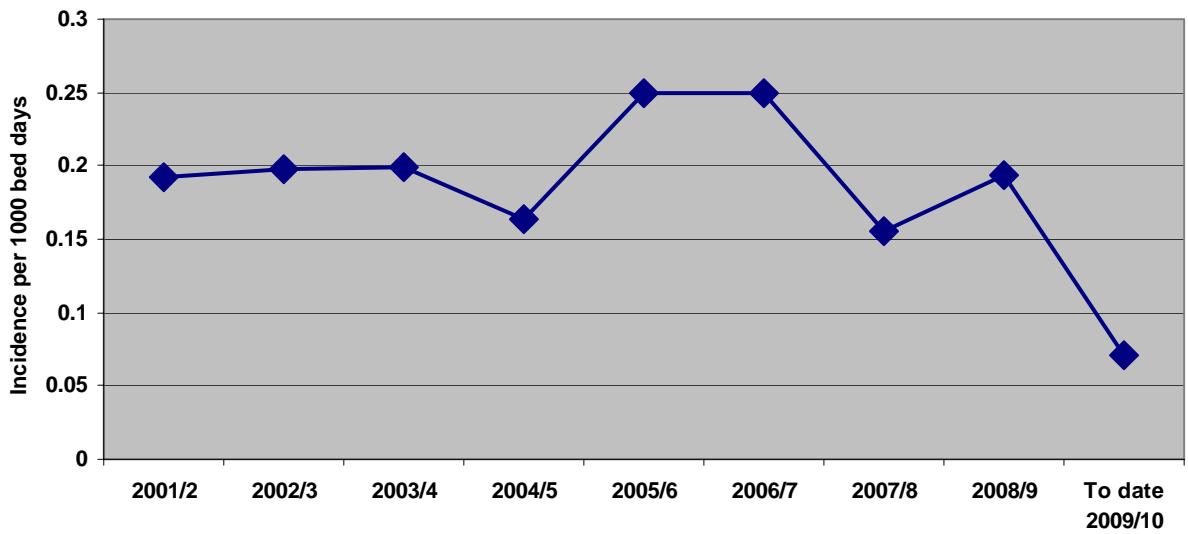
There has been a 45% reduction in the total number of cases of *C. difficile* between 2007/8 and 2008/9. As of 30th September 2009 there had been 18 cases of post 48 hour *C. difficile* against a target to date of 45. Each post 48-hour case is reviewed and action for improvements rapidly dealt with.

- **Orthopaedic Surgical Site Infections:** In the four reporting periods up to 30th June 2009 the Trust entered surgical site infection surveillance data for hip replacements, knee replacements and surgical repair of fractured neck of femur. The hip replacement infection rate at the Whittington was 1.9 % compared to the national benchmark of 1.8%. The knee replacement infection rate was 1.5% against the national benchmark of 2.8%. For patients having hip hemiarthroplasties and dynamic hip screws for fractured neck of femurs the infection rate was 5.4% against a national benchmark of 2.2%.

6.2 Trends in HCAI Statistics

A summary of the monthly performance in the management of MRSA bacteraemia and *Clostridium difficile* is attached as IPC flash report, Appendix D. The trust takes its responsibilities for reducing HCAI very seriously; these figures are monitored weekly by the executive committee and are reported to every trust board meeting. The following charts show the trends in HCAI rates from year to year since mandatory surveillance commenced.

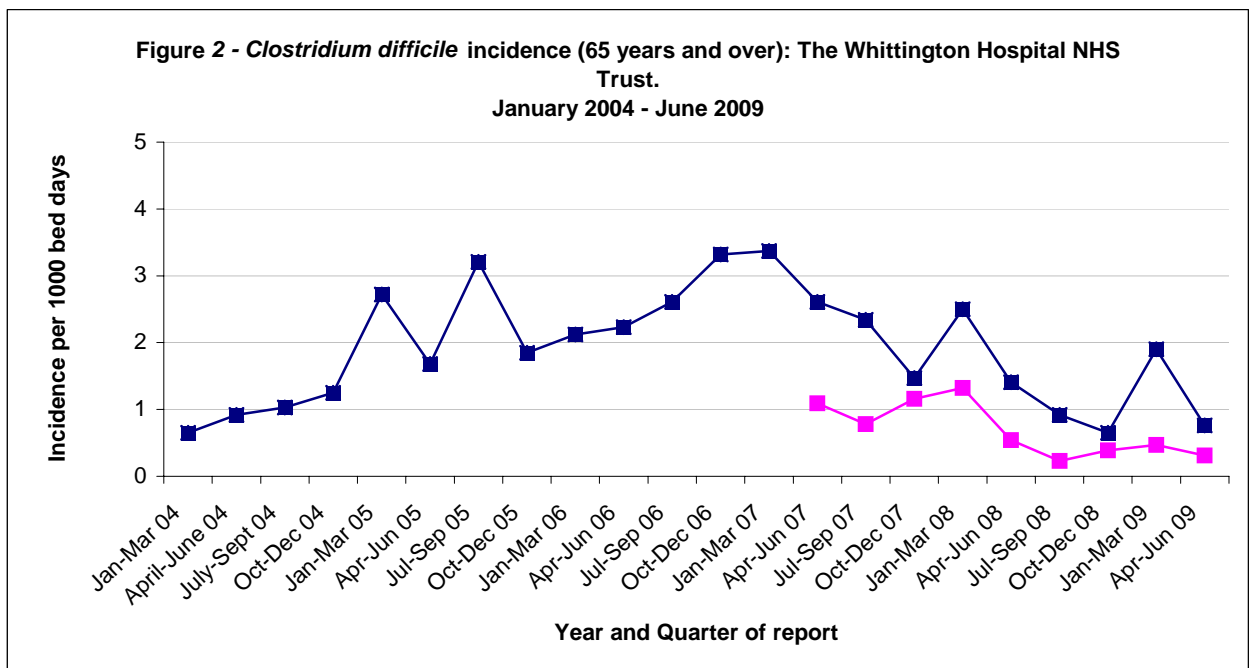
Figure 1 - MRSA bacteraemia episodes per 1000 bed days at the Whittington NHS trust



Source: Health Protection Agency

As shown in Figure 1, MRSA bacteraemia rates per 1000 bed days reached a peak in 2005/6; in 2007/8 the rates were the lowest recorded since mandatory reporting started in 2001/2. Incidence per 1000 bed days did increase in the financial year 2008/9. However the year to date incidence rates show the lowest incidence of MRSA bacteraemia episodes since surveillance begun. The last MRSA bacteraemia was diagnosed in April 2009, 200 days ago at the time of writing this report.

Figure 2 - Clostridium difficile incidence (65 years and over): The Whittington Hospital NHS Trust. January 2004 - June 2009

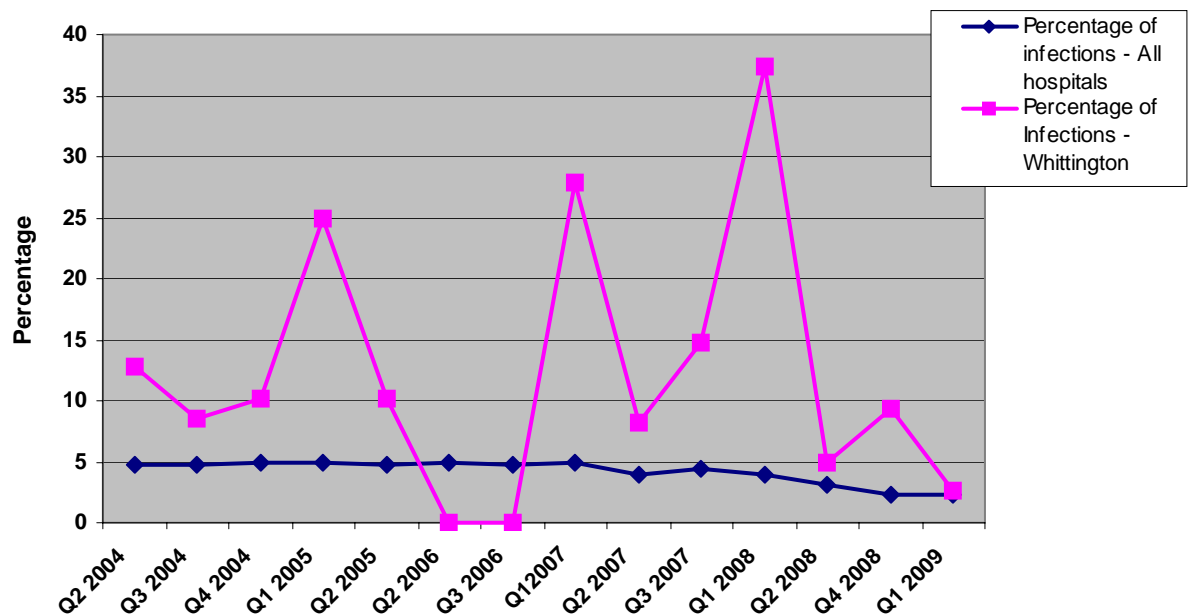


Source: Health Protection Agency

Incidence of *Clostridium difficile* cases in patients aged 65 years and over (shown in the blue lines) peaked in late 2006/early 2007 as shown in Figure 2. Recently we have seen a return towards incidence per 1000 bed days figures last seen in 2004 when mandatory surveillance commenced. The pink line shows the incidence of *C. difficile* cases seen in 2-64 year olds; this data collection became mandatory from April 2007. The incidence of cases in this younger age group has significantly decreased recently.

At the time of writing this report there had been no cases of *Clostridium difficile* diarrhoea diagnosed within the Trust (post 48 hour cases) for over 60 days.

Figure 3 - Percentage of infections in patients having hemiarthroplasty operations (and DHS operations from Q2 2008)



Infection rates for patients having elective operations for hip and knee replacements have been consistently at or below the national benchmark figures for many years.

The infection rates in patients undergoing hemiarthroplasty or dynamic hip screw procedures for neck of femur fractures as shown in Figure 3 has been above national benchmark figures and the IPCT have been working in collaboration with the Orthopaedic department to ensure this is urgently addressed. An orthopaedic surgeon represents the surgical directorate at the ICC and reports regularly on progress.

New guidelines and teaching around them for all orthopaedic medical, nursing and theatre staff have been recently introduced based on National Institute of Clinical Excellence (NICE) guidance for reducing the risks of surgical site infection. This work is being regularly audited and recent infection rates from Quarter 1 2009 have been more encouraging. Figure 3 shows the infection rates at the Whittington in Q1 2009 at the national benchmark figure for the first time since Q3 2006. This area will be a

continued area of focus for the IPCT in collaboration with the orthopaedic department in 2009/10.

6.3 Other surveillance work

The trust invested in the IPCT to fund a fulltime surveillance co-ordinator in 2008/9. The IPCT have been able to expand the number of surveillance schemes that the Trust contributes to. In quarter 3 2008/9 the IPCT and General Surgical department carried out surgical site infection surveillance for colorectal and vascular procedures. The infection in colorectal surgery was 2.9% compared to the national benchmark of 10.5%. The infection rate in vascular surgery was 0% against national benchmark of 4.4%. Clearly these results are very encouraging. NICE guidance on reducing the risks of surgical site infection have been introduced in these areas and repeat surveillance will be carried out in quarter 3 2009/10.

In quarter 1 2009/10 the IPCT and Maternity department carried out surgical site infection surveillance for Caesarean sections (CS). The CS infection rate was estimated to be 5.5%. The national benchmark figure was not available but is expected to be 9-12%. Further surveillance work in maternity is planned.

Universal MRSA screening for all emergency adult admissions was introduced on 1st January 2009. Audits have shown that between 90-95% of patients were screened within 48 hours of their admission. Universal screening of all elective surgical and haematology-oncology patients was introduced on 1st April 2009. Compliance with this screening has been more difficult to introduce in the Trust but latest compliance figures from October 2009 was 78% overall and 98% for elective surgical inpatients.

6.4 Serious Untoward Incidents, including Outbreaks

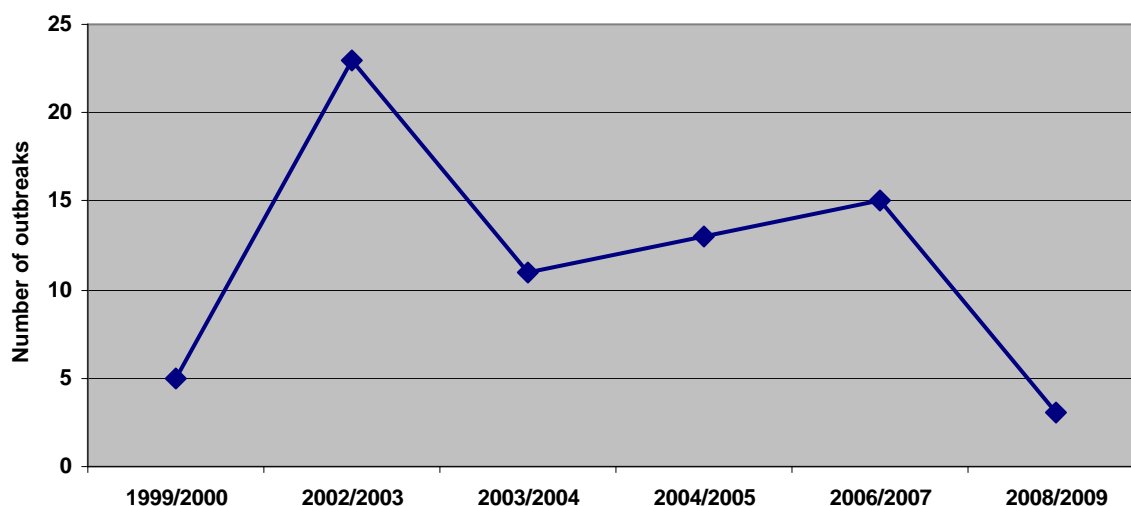
A SUI inquiry commenced in January 2009 to investigate the circumstances relating to four MRSA bacteraemia cases associated with Meyrick ward in the two-month period from December-January 2009. A SUI panel met in March 2009 to determine whether there were any factors to account for the cluster of cases and to identify lessons that could be shared across the trust. There were 8 main findings and recommendations based on these that were presented at Trust board and shared across the Trust.

The recommendations of the SUI panel were as follows;

- More robust training required for relevant staff on blood culture taking and other practical procedures delivered by an expanded practice development team.
- Enhanced role of bed management required to ensure admission MRSA screen occurs.
- Increase in compliance with MRSA suppression policy required through audit and feedback.
- Increase in compliance with Isolation and personal protective equipment policy required through audit and feedback.
- Agreement to ensure continued bed thinning on the Care of the older person wards.
- Introduction of urinary catheter policy and training programme based on this.
- Leadership training at deputy ward manager level should be prioritised
- The sharing of learning from the RCA investigations should be wider

There were 3 outbreaks of diarrhoea and/or vomiting in the period 2008/9 that were associated with ward closures. All outbreaks occurred on medical wards and were rapidly dealt with through the implementation of an outbreak management group. Figure 4 demonstrates the reductions in the number of diarrhoea and/or vomiting outbreaks associated with ward closures over recent years.

Figure 4 - Number of diarrhoea and/or vomiting outbreaks associated with ward closures per year at the Whittington NHS Trust



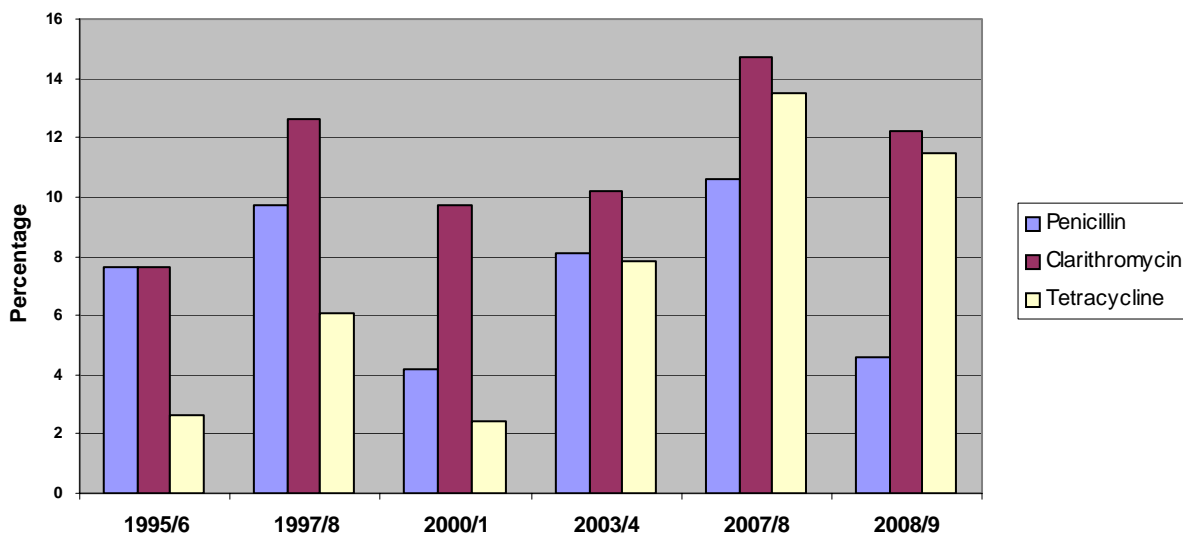
6.5 Antimicrobial resistance

Limited historical information is available on antimicrobial resistance patterns as the Whittington microbiology laboratory changed to an alternative computer system in April 2007. Results for the most relevant resistance patterns from April 2007 onwards are discussed with reference to any historical data that could be determined from other sources;

Streptococcus pneumoniae

Antimicrobial resistance rates of clinical *Streptococcus pneumoniae* isolates (ear, eye, respiratory isolates, cerebrospinal fluid and blood) from 2007/8 and 2008/9 are shown in below graph and compared to historical data.

Figure 5 - Percentage of *Streptococcus pneumoniae* isolates resistant to first line antimicrobials



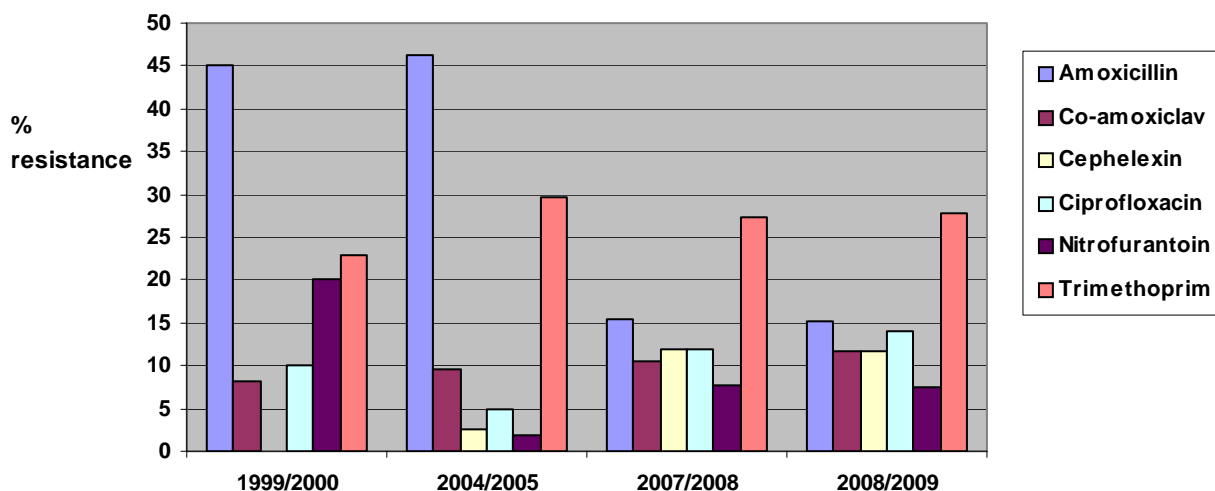
Extended spectrum Beta lactamase producers

Percentage of *E. coli* and KES (klebsiella, enterobacter or serratia) urine and blood culture isolates producing Extended spectrum beta lactamase (ESBL) enzymes was found to be 1.8% in 2007/8 and 3.7% in 2008/9. These isolates if clinically significant will respond to intravenous carbapenems. Oral nitrofurantoin or fosomycin can be considered for community management.

First line antimicrobials for community urine isolates

Resistance rates of mid stream urine significant isolates sent from the community to the six first line antimicrobials is shown in the graph below, Figure 6.

Figure 6 - Midstream urines with greater than 10⁵ organisms/ml (pure growth) and rate of antimicrobial resistance amongst community samples sent to the Whittington microbiology laboratory



6.6 Healthcare worker exposure to blood borne virus

The number of sharps and bloodsplashes injuries (potentially exposing staff to blood borne viruses such as HIV) reported to Health and work centre was 87 in 2008/9. There has been a reduction in the number of sharps injuries from a high of 104 in 2004/5 to 57 in 2007/8 and 69 in 2008/9.

The trust has moved to safety products for peripheral line cannulation following recommendations by the Code of practice (Health Act 2006). Needle free access devices for intravenous equipment are available on all wards and other clinical areas. The IPCT have been involved with the introduction of these throughout the trust including ensuring training occurred. Sharps refresher training was delivered to over 1600 staff in January-March 2009 and forms part of all induction and mandatory refresher sessions.

7.0 Hand Hygiene and aseptic technique protocols

During the last 3 years, the trust made a concerted effort to ensure that hand hygiene was top of the agenda across the trust. The trust had previously signed up to the National Patient Safety Agency's Cleanyourhands campaign; the lead for the programme is the Matron for acute services, who ensured that all the relevant posters and campaign materials were shared across the hospital. Following the release of the new materials in January 2008, the campaign's screensaver was installed on all computers across the trust, as an ongoing reminder to staff.

The trust also rolled out mandatory hand hygiene refresher training for every employee. The success of this programme has resulted in a decision to provide this yearly as part of clinical and non-clinical staff mandatory training.

Compliance is monitored through 6 weekly hand hygiene audits across all clinical areas. The results have shown consistent improvements since their introduction with most clinical areas having hand hygiene compliance scores over 95%. The results are now presented as part of a ward IPC performance dashboard, Appendix C.

With regard to aseptic protocols, the trust agreed to follow the guidance set out in the Saving Lives High Impact Interventions. This includes the management of central venous catheters, peripheral cannulae, renal dialysis catheters, urinary catheters and tracheostomies, and the prevention of surgical site infection and *Clostridium difficile*. Up to date evidence based guidelines for all these areas are found on the Clinical guidelines section of the intranet. Compliance with these guidelines forms part of the ward IPC dashboard. Compliance has improved steadily since the introduction of the Saving lives and is now at a high level. For example, 93% of staff carried out all 8 steps of the central line insertion bundle and 95% of staff carried out all 7 steps of the peripheral line care bundle when audited in 2009.

Saving lives a

Udits undertaken are presented at ICC, CGC as well as to relevant user groups and departmental meetings.

8.0 Decontamination

8.1 Arrangements

The Director of Facilities is responsible for decontamination at board level. The sterile services manager, who is also the designated lead manager for decontamination, supports him. The Director of facilities is a member of the ICC. The trust's decontamination arrangements are in line with the duties of the Hygiene Code, and are supported by a number of policies, which are available on the intranet.

8.2 Committee Activities

The trust's decontamination committee meets bi-monthly. Because the scope of the committee is so broad, the committee agenda is structured to ensure that over a 4-month cycle all aspects of decontamination are covered. Generally this means that reports are received every other meeting covering performance of decontamination equipment and audits of decontamination services. Reports are received at every meeting detailing decontamination service failures. In addition staff training is reviewed as well as the process of reviewing and refreshing policies.

8.3 Audit

Audits are carried out regularly and reported to committee on a bi-meeting frequency. During the year new audits were added to those already carried out; in addition to the audits to the Endoscopy Processing Unit and the Sterile Services Department the audits to the mattress and mop decontamination rooms were introduced. This was as a result of observations made during the Health Care Commission visit to the trust carried out in February 2009.

8.4 Incidents or Failures Investigated

At the end of March 2009 a total of 15 incidents had been recorded for the year 2008/9 (down 3 on the previous year). Of these, 10 were risk rated as 'low risk' (up two on the previous year), one was risk rated as 'medium risk' (down one on the previous year), and four were rated as 'high risk' (down four on the previous year).

For each of the incidents reported, an incident form is completed and an investigation carried out by the sterile services manager. The committee monitors on a monthly basis progress with both the investigation and any subsequent action plan arising.

In addition to the specific incidents identified as part of the monitoring regime and external audit by The Healthcare Commission in February of 2009 identified two issues of some significance. These related to the working practices and environment associated with the decontamination of mattresses and mops. Trust took the issues are raised seriously and over the course of four weeks completely refurbished these

rooms and instigated procedures to ensure that both areas were regularly audited and that these audits are reported to the decontamination committee.

8.5 Review of the priorities for 2008/9

The priorities for 2008/9 were;

- Continue to support the Local Implementation Team in transferring sterile services offsite
- Construct and commission a new medical equipment washer and service
- Commence development of a new endoscope-processing unit (EPU).
- Develop the role of the decontamination services manager to encompass the new medical equipment washer and the redeveloped endoscope-processing unit.

The Northwest London Decontamination Project

In 2002 it was agreed at a national level that the NHS would go through a major modernisation programme to update the provision of sterile services within the entire NHS. The impetus for the project came from a Department of Health survey in 1999 that found in many instances decontamination processes fell short of the required standards, increasing the risk of cross infection between patients or patients and staff. It found buildings and equipment requiring replacement, and management and training systems in need of improvement. It became clear that many hospital decontamination and sterilisation departments did not comply with European legislation. As part of this national strategy to improve decontamination sterilisation of reusable medical instruments in the NHS it was proposed there would be significant cooperation between NHS Trusts and the private sector.

In October 2007 a preferred bidder was identified, and financial close was reached on 1 April 2008, which confirms that In Health Sterile Services (IHSS) would be the service provider. The contract with IHSS is initially for a 15-year period.

Following financial close a detailed transfer schedule was drawn up with the first service transfers due to take place in April 2009. The proposed transfer to the Whittington Hospital was July 2009 with all sterilisation due to be supplied from the Park Royal site. This date was amended to 18 August 2009.

Development of an Equipment Decontamination Unit

The new equipment decontamination unit was completed in March of 2009. The unit comprises an HTM2030 compliant washer made by Belimed. The unit was commissioned and ready to start operation for April 2009. The unit will be staffed by experienced operators from the sterile services team who will also carry out decontamination of medical equipment that is kept in the medical equipment library adjacent to the EDU. When the unit is fully operational it will process all non-electrical medical equipment including drip stands, commodes, dressing trolleys and wheelchairs.

Development of An Endoscope Processing Unit

Construction of a new decontamination unit for flexible endoscopes was started in January of 2009. The unit is located in an area vacated by services transferred into

the new hospital wing in 2008. Two double-ended HTM2030 compliant washers have been procured and installed in a fully compliant unit. The unit is scheduled to be completed and operational in time for the JAG assessment schedule for August 2009.

Decontamination Service Manager

The role of Sterile Service Manager was disestablished in 2008 in preparation for the transfer of sterile services to an off site provider.

As part of development of the new equipment and endoscope washing facilities the role of Decontamination Service Manager was created as a part-time post. The role was to oversee the management of the two prime centres for decontamination (the EPU and EDU), and also to support the rest of the trust with decontamination advice in relation to local procedures. The post was filled via a bank member of staff. This will be recruited to substantively during 2009/10.

8.6 Priorities for 2009/10

The priorities for the current year are focused on three areas;

- Achieve the transfer of sterile services offsite
- Achieve full operation of the new Equipment Decontamination Unit (EDU)
- Achieve full JAG accreditation of the new Endoscope Processing Unit (EPU)

9.0 Cleaning Services

9.1 Management Arrangements

An in-house team, comprising 160 Facilities Service Assistants (FSAs), 6 full time team leaders, 2 part-time evening team leaders, a weekend deep clean team and a housekeeping manager, undertakes cleaning at the Whittington. The teams are responsible for maintaining the cleanliness standards throughout the hospital wards, departments and public areas.

In addition, the facilities directorate manages 10 service contracts for external contractors who carry out services including window cleaning, pest control and waste disposal.

9.2 Monitoring arrangements

Each ward has a service level specification that outlines the priority duties and tasks to be performed by the FSA's. As well as the general ward and toilets cleaning schedules, they also include instructions for the cleaning of cubicles and bed areas following the discharge of an infected patient. These schedules are displayed publicly in all wards.

Each month the VLT carries out monthly audits using the NHS cleaning standards. Following the introduction of these audits in September 2007, each ward was required to maintain a minimum of 80% compliance with the standards. From April 2008, the trust board raised that standard to 90%. During the six months from September 2007 to March 2008, cleaning standards saw a measurable improvement across the hospital. In September 2007, 41% wards achieved the standard of 80%.

By April 2008, this had improved to 60%, with further significant improvements achieved in the following months.

Overall hospital results from May 2008 through to April 2009 were consistently above 90%. From May 2009 Trust board raised the standard to 95%.

Immediate feedback is provided to wards at the time of the audit and the results are reported widely across the hospital, including to the hospital management board, the ICC, the CGC and the ward managers meetings. The cleaning results are also reported on the trust board's performance dashboard report and the IPC dashboard.

9.3 Budget Allocation

The housekeeping pay budget for 2008/9 was £4,670,553. Approximately three quarters of the budget is for the domestic facilities services assistants, with the remaining quarter allocated to portering services.

Non-pay allocation was £407,512, the majority of which is for cleaning materials.

9.4 Clinical Responsibility

Although the management of cleaning sits in the facilities directorate, the clinical and facilities teams work closely together. The ward managers include the FSA's as part of their team and this helps ensure ownership and pride. The matrons' job descriptions include ensuring the cleanliness of their areas, and they carry out inspections with the housekeepers, in line with the requirements of the Matrons Charter. The Assistant Director of facilities personally contributes to the VLT cleanliness audits and attends the feedback sessions.

9.5 PEAT Results

The 2008/09 PEAT self-assessment was carried out on Tuesday 10th March 2009. An external assessor accompanied the audit team.

The results are shown below along with the previous two years.

Area	2007 Score	2008 Score	2009 Score
Cleanliness and the Environment	80%	81%	85%
Food	84%	91%	92%
Privacy and Dignity	78%	80%	91%

The scores obtained in the 2009 PEAT audit represent a rating of 'good' in the three areas audited. This put the Whittington in the same category as 60% of other trusts for cleanliness, 37% for food and 50% for privacy and dignity.

9.6 User Satisfaction Measures

There are a number of ways that users are able to feedback their opinions on how clean the hospital is. Having a clean hospital is the first of the Whittington Promises

and is therefore a key measure in our patient satisfaction survey, which is used trust wide.

The trust's website includes our "Housekeeping Department Customer Charter", which sets out what they aim to achieve and invites feedback from users by e-mail or telephone.

We also ensure that users know how to make a complaint; historically cleanliness has been a recurrent theme, however, pleasingly the numbers of complaints received about this has been consistently decreasing.

10.0 Audit

10.1 Extent of Audit Programme

Audit of infection prevention control practice is conducted as part of the trust's main clinical audit programme, as part of the IPCT work and by the VLT, as follows: -

- Infection Prevention and Control Team
 - Saving Lives audits
 - Surgical site infection surveillance scheme
 - Compliance with antimicrobial policies
 - MRSA screening and interventions

- Visible leadership Team
 - Hand hygiene
 - Environmental cleanliness
 - Compliance with isolation and personal protective equipment policies

All results are presented immediately at ward level as part of the IPC dashboard.

10.2 Reasons for audit focus

The reason for carrying out all the above audits was to help the trust to reduce the incidence of MRSA bacteraemia, *Clostridium difficile*, surgical site infections and other HCAI. Audits help to raise awareness, measure performance and enable focused actions to be taken to improve.

As the same principles of best practice apply whatever the infection type, by raising performance in these two key areas, performance should improve the prevention and control of all infections.

10.3 Report from Antimicrobial Pharmacist

The DoH has put a huge emphasis on trusts to produce and implement antimicrobial stewardship strategies to encourage prudent antimicrobial prescribing. Unnecessary and inappropriate antimicrobial prescribing increases the risk HCAI's, drives up antimicrobial resistance and puts a burden on hospital resources.

Whittington has developed a robust antimicrobial audit programme, which is divided into core and targeted audits, see Appendix E.

The core programme is lead by the Antimicrobial Pharmacist and Consultant Microbiologist, and comprises the biannual audits of trust wide antimicrobial prescribing practice and compliance to antimicrobial policies, with data going back to 2005. Results of the audits are presented to the ICC and the ASG. The summary of the results is attached in Appendix E.

In March 2009, quarterly targeted ward audits was added to the core programme, which involves the DIPC and Antimicrobial Pharmacist undertaking targeted audits on a total of 12 wards. Each ward is audited quarterly and results of the audit are fed back to the respective ward or team in the form of a dashboard. Wards are then able to benchmark their prescribing practices against trust average and identify improvement strategies.

The targeted programme focuses mainly on priority areas including MRSA suppression therapy, antimicrobial surgical prophylaxis and specific treatment guidelines. The programme depends largely on the continual participation and contribution from medical teams and pharmacy.

In June 2009, Whittington participated in the European Surveillance of Antimicrobial Consumption Project (ESAC PPS-3). This project provides an ideal platform on which the trust can benchmark their antimicrobial prescribing practices against other hospitals within UK and Europe.

11. Conclusions

The Whittington has maintained a high focus on reducing healthcare associated infections during 2008/9. There has been an enthusiastic, consistent and co-ordinated input from the IPCT and all associated teams.

The MRSA bacteraemia target (April 2008 - March 2009) of 15 was not achieved but the trust is currently below trajectory for MRSA bacteraemia in 2009/10 and is in line to achieve the MRSA target this year. This has been achieved by zero tolerance approach to MRSA bacteraemia and the enormous effort and excellent practice of all Whittington staff. It has also been achieved in a cost effective way. The estimated Trustwide non-pay costs for the entire financial year 2008/9 for actions to reduce MRSA bacteraemia episodes (such as screening, suppression, skin preparation and all education materials) was £34,000.

The target reduction in *Clostridium difficile* infections was achieved and the Trust is again on plan to reduce this further in 2009/10.

In most areas of surgical site infection surveillance carried out at the Whittington the infection rates were below national benchmark rates. There has been recent improvement in infection rates for patients undergoing repair of fractured neck of femur surgery.

All of the work outlined in this report enabled the trust to declare compliance against three of the Healthcare Commission's core standards, for the 2008/9 annual health check:

C4a the risk of healthcare acquired infection to patients is reduced

C4c the risks associated with decontamination facilities and processes are well managed

C21 cleanliness levels in clinical and non-clinical areas meet the national specification for clean NHS premises.

The work put in place during 2008/9 has provided a consistent and solid foundation to our promise of delivering clean safe care to all patients.

There are potential threats to our ability to deliver the IPC 2009/10 action plan. There are ongoing concerns with both the number and quality of available staff in difficult to recruit areas such as Critical care, Emergency department and maternity. The ability of the IPCT to produce ward based IPC dashboard relies on the continued input from the VLT and investment in a permanent IPC administration post. The IPCT are contributing to an expanding programme of IPC training without a recent rise in numbers of clinical staff and without a corporate training budget. The newly developed role of practical procedures training and competency assessment for clinical staff will not be sustainable in the longer term unless there is further development and expansion of the practice development team as outlined in the MRSA bacteraemia SUI report. The high bed occupancy rates and ongoing bed reduction programme also threaten the deliverability of IPC action plan. The potential threats to the IPC plan have been discussed with relevant Executive Directors.