

# CENTRAL MANCHESTER UNIVERSITY HOSPITALS NHS FOUNDATION TRUST

<b>Report of:</b>	Director of Patient Services/Chief Nurse/Director of Infection Prevention & Control
<b>Paper prepared by:</b>	Nurse Consultant Infection Prevention and Control
<b>Date of paper:</b>	April 2010
<b>Subject:</b>	Annual Report of Infection Prevention and Control Team
<b>Purpose of paper:</b>	To inform the Trust Board of the activities and progress of the Infection Prevention and Control Team for 09/10

## Introduction

The Board is asked to receive the annual Infection Prevention and Control report for 2009/10

## Executive Summary

2009/10 has been an exceptional year for Infection Prevention and Control within the Trust during which time we have exceeded the requirements for achieving performance targets in reduction of Healthcare Associated Infections (HCAI's). Challenges have included the preparation and management for the pandemic influenza and the unexpected high incidence of norovirus outbreaks in the latter part of the year.

In addition to achieving best in class in regards to our performance against key HCAI's the IPCT has demonstrated success in areas such as decontamination, research and innovation, education and training and most importantly sustained cultural change.

### 1. Key Achievements

- 1.1 The actual number of MRSA bacteraemia was eight compared to the target of 24. This was a reduction of 53% when measured against 2008/9 when there were 17 incidents of MRSA bacteraemia. This has been achieved through a range of consistently applied interventions and sustained monitoring of performance across the organization.
- 1.2 The total number of incidents of *Clostridium difficile* infection (CDI) attributable to inpatients at CMFT was 123 which was 54% under the agreed target of 266 cases. This was a 34% reduction in comparison to 2008/9. This was facilitated by sustained performance in antibiotic prescribing and the continuation of the weekly review of individual patients.
- 1.3 The trend for hand hygiene indicated an increased compliance from 94% to 97% for 2009/10 and although there is some variation all divisions demonstrated an improvement in their level of compliance compared to their performance at the beginning of the year.

- 1.4 Auditing compliance with Aseptic Non Touch Technique (ANTT) and Visual Inspection of Phlebitis (VIP) score in the Divisions of Medicine and Surgery became embedded into practice over the past 12 months. Results were consistently above 90% compliance.
- 1.5 In adults, the trend in blood culture contamination rates has substantially declined from over 12% in 2006, to 2-5% in 2009/10. This is testament to the trust-wide implementation of the general principles of ANTT in January 2007 and specifically the revised blood culture taking protocol in January 2008
- 1.6 Planning to manage the local consequences of pandemic influenza required extensive co-operation across the Trust. This was in response to both national and international concerns with the potential to cause significant disruption to services. In total 500 suspected cases were treated between July 2009 and March 2010. Preparation for prevention and control arrangements included; training staff in the use of respirator masks, clinical management of patients, and establishing a novel programme for staff vaccination.
- 1.7 Nationally, norovirus activity during the winter of 2009/10 was 34% higher than for the previous year. Locally, CMFT had 19 separate outbreaks and subsequent ward closures between January – March 2010 with a total loss of 3095 bed days. Valuable lessons were learnt and will be used to prepare for the Winter 2010/11
- 1.8 The Trust Decontamination Group was inaugurated in September 2009. Considerable progress was made in improving decontamination services for re-processing of endoscopes. Following an external review of current facilities and practices commissioned by the Trust, a business case has been submitted for the centralization of satellite endoscopy services into the Decontamination Services Department, and the upgrade of the central endoscopy departments.
- 1.9 The New Hospital Development provided improved facilities in build and design. There have however been significant requirements for the input of the infection prevention and control team to help embed the new services following the commissioning period. Also there have been considerable cultural and training challenges to ensure the maintenance of a safe and clean environment. The Trust has continued to work in partnership with Sodexo Healthcare to ensure these challenges are being identified and services developed.
- 1.10 'e'-Learning packages developed for Corporate and Clinical Mandatory training were well received by staff and training was extended to target all new medical staff.
- 1.11 The Trust continued to be the North West representative on the Showcase Hospitals Project. This included the development of a bespoke DVD used for hand hygiene training which has been distributed nationally and

internationally. The Infection Prevention and Control Team (IPCT) have also co-ordinated trials of a novel disinfectant and novel laboratory detection test for MRSA.

- 1.12 In January 2010 the Care Quality Commission (CQC) unannounced inspection focussed on the patient environment and decontamination of patient-shared equipment. An action plan was successfully implemented to meet the recommendations and requirement made by the CQC.

## **2. Future Work Programme**

The Corporate Infection Prevention & Control Action Plan for 2010/11 can be found in Appendix 5.



Central Manchester University Hospitals



NHS Foundation Trust

**INFECTION PREVENTION &  
CONTROL ANNUAL REPORT  
2009/10**

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## **SECTION 2: INFECTION PREVENTION & CONTROL ARRANGEMENTS**

### **2.1 The Director of Infection Prevention and Control (DIPC)**

Mrs Gill Heaton, Director of Patient Services/Chief Nurse, continued her tenure as the DIPC for the Trust.

### **2.2 The Infection Prevention & Control Team (IPCT)**

2.2.1 The present IPCT was established in 2007/8. Over the past year the team have harmonized and have continued to develop as a competent specialist advisory service across all areas of the Trust.

2.2.2 This year the Infection Control Nurse Team commenced an on-call service for weekends and out of hours. Initially this service began in anticipation of advice required during the Influenza Pandemic and was continued due to service demand.

2.2.3 The team comprised of the following personnel (whole-time equivalent (WTE) unless otherwise stated):

- Dr Andrew Dodgson, Microbiologist and Infection Prevention & Control Doctor
- Mrs Julie Cawthorne, Nurse Consultant, Infection Prevention & Control
- Mrs Jo Rothwell, Lead Nurse, Infection Prevention & Control
- Ms Jo Clubb (0.93 WTE), Infection Prevention & Control Nurse Specialist.
- Miss Janice Streets, Infection Prevention & Control Nurse Specialist.
- Mrs Michelle Worsley, Infection Prevention & Control Nurse Specialist.
- Mrs Melanie Phillips, Infection Prevention & Control Nurse Specialist
- Mr Federico Tabios Junior (0.6 WTE), Infection Prevention & Control Nurse Specialist
- Miss Rachel Soutar, Surveillance Officer
- Dr Andrew Turner, Consultant Virologist
- Dr Kirsty Dodgson, Consultant Clinical Scientist, Microbiology
- Ms Ann France, Secretary

### **2.3 The Infection Control Committee**

2.3.1 The Infection Control Committee (ICC) was chaired by the DIPC and met every two months. The Committee had corporate responsibility for all Infection Prevention & Control issues and monitoring the implementation of the Annual Infection Prevention & Control plan. The Committee had the following sub-committees which each provided regular reports to the committee meetings:

- Infection Prevention & Control Expert Group
- Medical Devices Committee
- Antibiotics Group
- The Patient Environment and Patient Experience Group
- Trust Decontamination Group

2.3.2 The Infection Control Committee provided written reports to the Trust Clinical Effectiveness Committee

2.3.3 The Trust Strategy for Infection Prevention and Control defines the structure and activities of infection prevention and control within CMFT. It can be found alongside all Trust-wide Infection Prevention and Control Policies on the Trust Intranet, Infection Control website.

2.3.4 The Terms of reference for the ICC can be found in Appendix 1.

## **2.4 Infection Prevention & Control Structure within the Divisions**

Each Division addressed Infection Prevention & Control issues at a local level either as a standing item on the Divisional Clinical Governance meeting or through a separate Divisional Infection Prevention & Control Committee/Group. These meetings included representatives of the IPCT and provided an excellent forum for discussion and resolution of local issues.

## **2.5 The Infection Prevention & Control Link Practitioners (ICLP's)**

2.5.1 There were approximately 40 link nurses representing a broad range of clinical areas across all divisions. Meetings were held monthly and the average attendance was 12 link nurses. The meetings were designed to facilitate the development of knowledge and skills of the link nurse to enable them to cascade information and training on infection prevention and control Trust standards at a local level.

2.5.2 Feedback from the link nurses identified that they do not perceive they have sufficient time to be released to attend meetings and in turn disseminate relevant information to colleagues. These issues were addressed by reviewing the times of the meetings and giving more advanced notice of topics to be discussed and dates of meetings.

## **SECTION 3: BUDGET ALLOCATION TO INFECTION PREVENTION & CONTROL ACTIVITIES**

### **3.1 Funding for Infection Prevention & Control**

The Infection Prevention and Control Team is fully funded

- Funding for Microbiology Laboratory services (including outbreaks of infection) was covered by the Service Level Agreement (SLA) between the Trust and the Health Protection Agency.
- Funding for outbreaks of infection (excluding laboratory costs) were funded locally by the divisions.
- The Service Level Agreement of 0.4 (FTE) Band 7 with the Manchester Mental Health and Social Care Trust continued this year. It includes all key Infection Prevention & Control activities for services based at the Central site.
- Recurrent funding for ICNet (electronic Infection Prevention & Control surveillance database) was met from the divisions.

## SECTION 4: HEALTHCARE ASSOCIATED INFECTION

### 4.1 Methicillin Resistant *Staphylococcus aureus* Bacteraemias

The Department of Health provided all acute trusts with a target to reduce the incidence of MRSA bacteraemias by 50% over a three year period (April 2005 – March 2008). The target for 2008/9 and 2009/10 was locally agreed with Manchester PCT and remained at 24.

The annual targets and actual results for CMFT can be seen below:

Year	Target	Actual Number
April 2005 – March 2006	47	54
April 2006 – March 2007	35	59
April 2007 – March 2008	24	21
April 2008 – March 2009	24	17
April 2009 – March 2010	24	8

#### 4.1.1 Overview of Root Cause Analysis of MRSA bacteraemias

Each incident of MRSA bacteraemia was investigated using a Root Cause Analysis (RCA) tool, and presented to the weekly Infection Prevention & Control meeting, chaired by the DIPC.

#### 4.1.2 Performance against the MRSA Bacteraemia Target

All incidents of MRSA bacteraemia were reported to the Health Protection Agency (HPA). The Trust has maintained a consistent year on year improvement in the number of incidents of MRSA bacteraemia for the past three years. This has been facilitated by a range of persistent dynamic interventions and constant monitoring of performance across the organisation.

CMFT is however committed to the principle of 'zero tolerance' of all avoidable Healthcare Associated Infections and it should be noted that of the eight incidents of MRSA bacteraemia reported to the HPA six were recorded as being avoidable and two as unavoidable.

#### 4.1.3 Extended Screening for MRSA

The Trust was compliant with guidance on screening of elective admissions by March 2009. General Practitioners in some practices across Manchester PCT (and other PCT's), however have remained resistant to providing appropriate re-screening and decolonisation therapy for MRSA positive patients prior to their admission. The IPCT are working with other colleagues in acute services across Manchester to address this issue. Meanwhile some patients have had to return to CMFT for follow-up decolonisation therapy and re-screening.

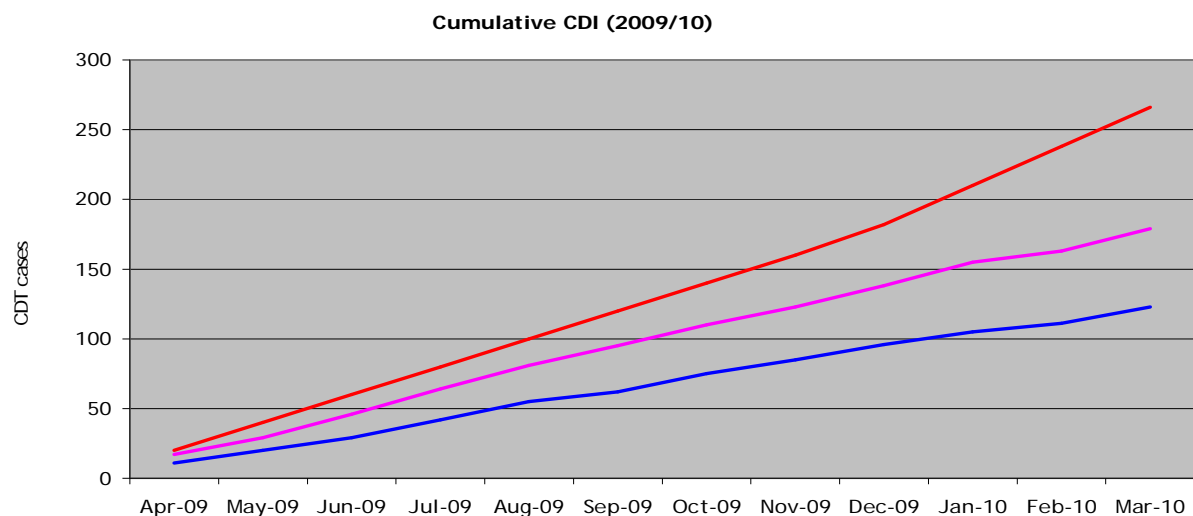
### 4.2 Clostridium difficile Infection (CDI) Target for 2009/10

The Trust had an agreed target with the PCT of 266 cases of CDI in all patients over the age of two for the year 2009/10. This was based on the baseline data of 380 cases in 2007/08. (Please see chart below).

4.2.1 All isolates of CDI (including those from general practitioners), that are tested in the CMFT Microbiology Laboratory are reported to the HPA. Those apportioned to the Trust (attributable cases), are positive results from in-patients who have been in hospital greater than 48 hours.

4.2.2 The total number of attributable cases was 123 in 09/10 which is 53.8% under the agreed target of 266 cases. This is a remarkable achievement.

#### 4.2.3 Overview of Root Cause Analysis of CDI



	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10
Trust apportioned	11	20	29	42	55	62	75	85	96	105	111	123
Reported	17	29	46	64	81	95	110	123	138	155	163	179
Trajectory	20	40	60	80	100	120	140	160	182	210	238	266

Since October 2008 the IPCT in conjunction with clinicians have undertaken an RCA for all cases of CDI when the patient required bowel surgery as a result of the infection or when CDI was noted on the death certificate. To date there have been ten RCA's completed. These RCA's have been used to review case management and identify lessons to be learned which have then been incorporated into policy.

#### 4.3 Glycopeptide (Vancomycin) Resistant Enterococci (GRE)

At present no target has been set in relation to GRE however, the Trust reported all incidents of GRE bacteraemia to the Health Protection Agency. The total number of incidents for this year to date (31/03/10) is four (annual totals run from September – October). Two occurred in the Division of Medicine, and two in the Critical Care Directorate. This is an increase from last year (September 2008 – October 2009), when the total number of incidents was two it is however difficult to draw any conclusions at the time of this report.

#### 4.4 Review of Figures for MRSA Bacteraemia, *Clostridium difficile* Infection and GRE Bacteraemia

The Trust has demonstrated a consistent year on year reduction in the number of incidents of the above. The following table represents reductions in these infections when data has been compared between rates of infection over the last two surveillance periods (Please see appendix 2 for bar chart)

<b>Infection type</b>	<b>2008/09</b>	<b>2009/10</b>	<b>% reduction</b>
MRSA Bacteraemia	17	8	52.9
<i>Clostridium difficile</i> Infection <sup>1</sup>	185	123	33.5
<b>Infection type</b>	<b>2007/08</b>	<b>2008/09</b>	<b>% reduction</b>
GRE Bacteraemia <sup>2</sup>	5	2	60.0

<sup>1</sup> Trust-apportioned cases

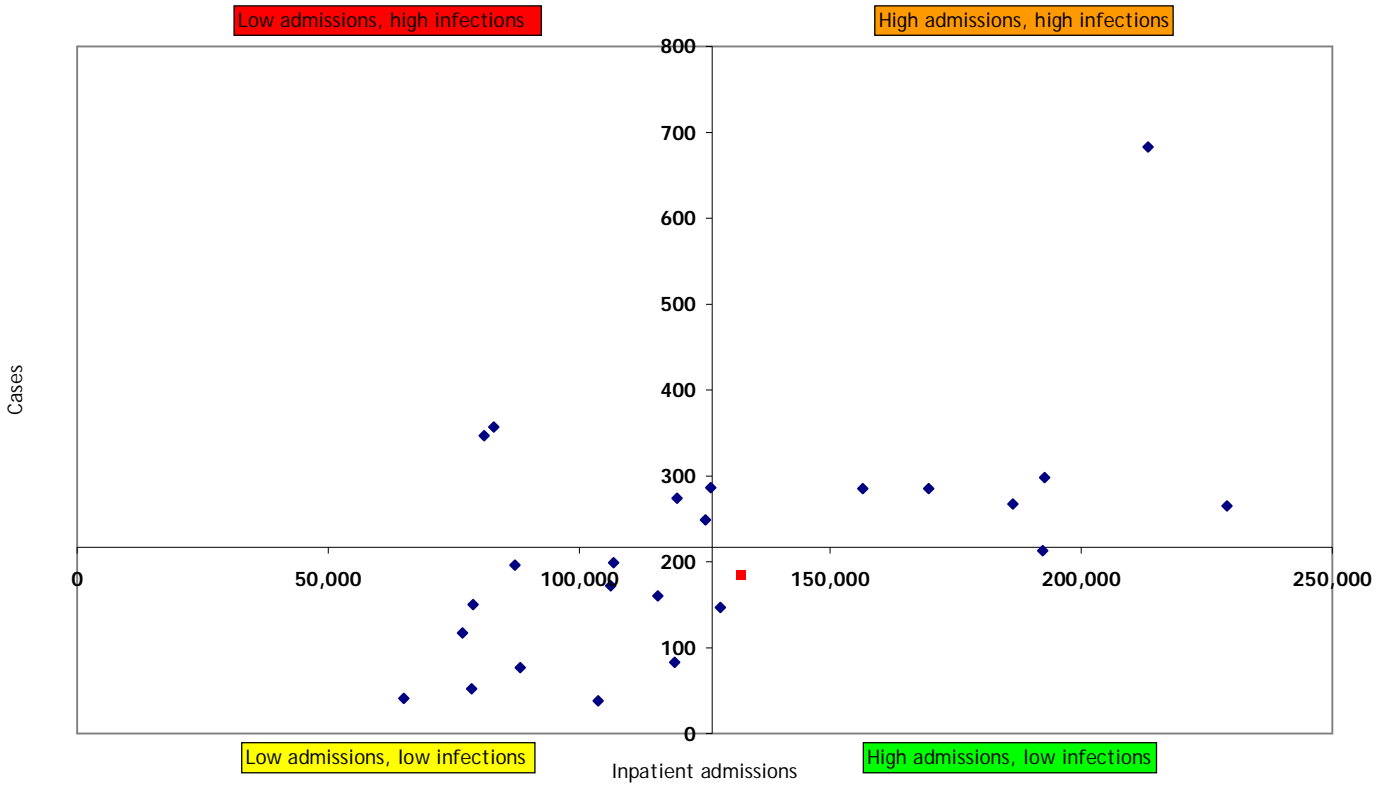
<sup>2</sup> GRE bacteraemia surveillance year runs from October to September

#### 4.5 CMFT Performance Compared to other Teaching Hospitals

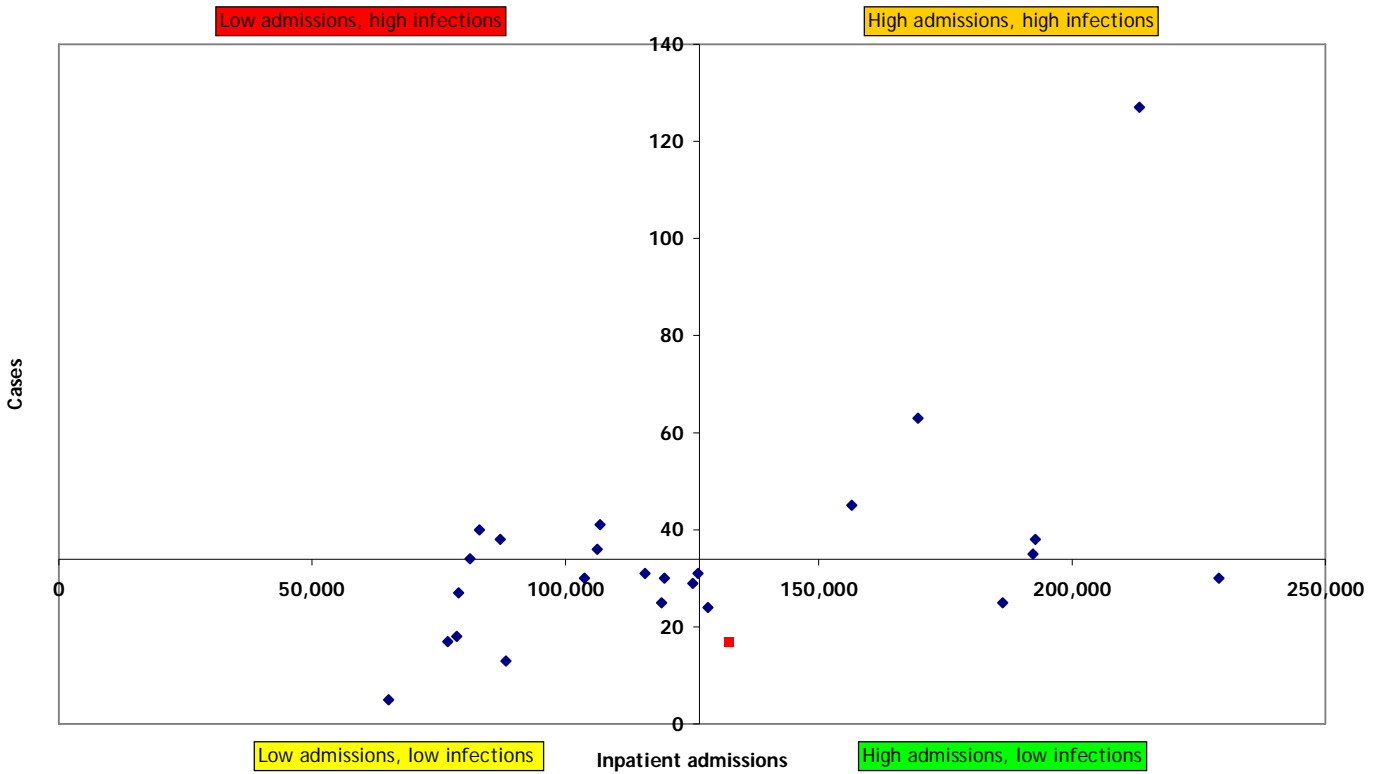
Using data available from HES (Hospital Episode Statistics) and the HPA's mandatory reporting results for 2008/09, it has been possible to produce a "best in class" matrix for both CDI and MRSA bacteraemias. Other teaching hospitals have been used for comparison with CMFT (please see charts below).

- 4.5.1 In the charts below, the x- and y-axis correspond to the average (mean) number of bed days and reported infections respectively. Due to the limited availability of data from other hospitals, these matrices can only be updated on a yearly basis.
- 4.5.2 Performance with regard to both MRSA bacteraemia and CDI rates show the Trust in the quadrant of high admissions/low infections (CMFT has been highlighted in the charts as a small red square). For CDI there are two other trusts (out of 25), in the same quadrant and similarly for MRSA bacteraemias, there are only three other Trusts in the same quadrant. Compared to other teaching trusts for the year 2008/09, CMFT demonstrated an outstanding performance.

Best in Class - *C. difficile* infection (2008/09, Teaching Hospitals)



Best in Class - MRSA bacteraemia (2008/09, Teaching Hospitals)



## 4.6 Surgical Site Infection (SSI) National Surveillance Scheme

The Trust participated in both mandatory (orthopaedic) and voluntary (coronary artery bypass graft (CABG)) reporting of SSI.

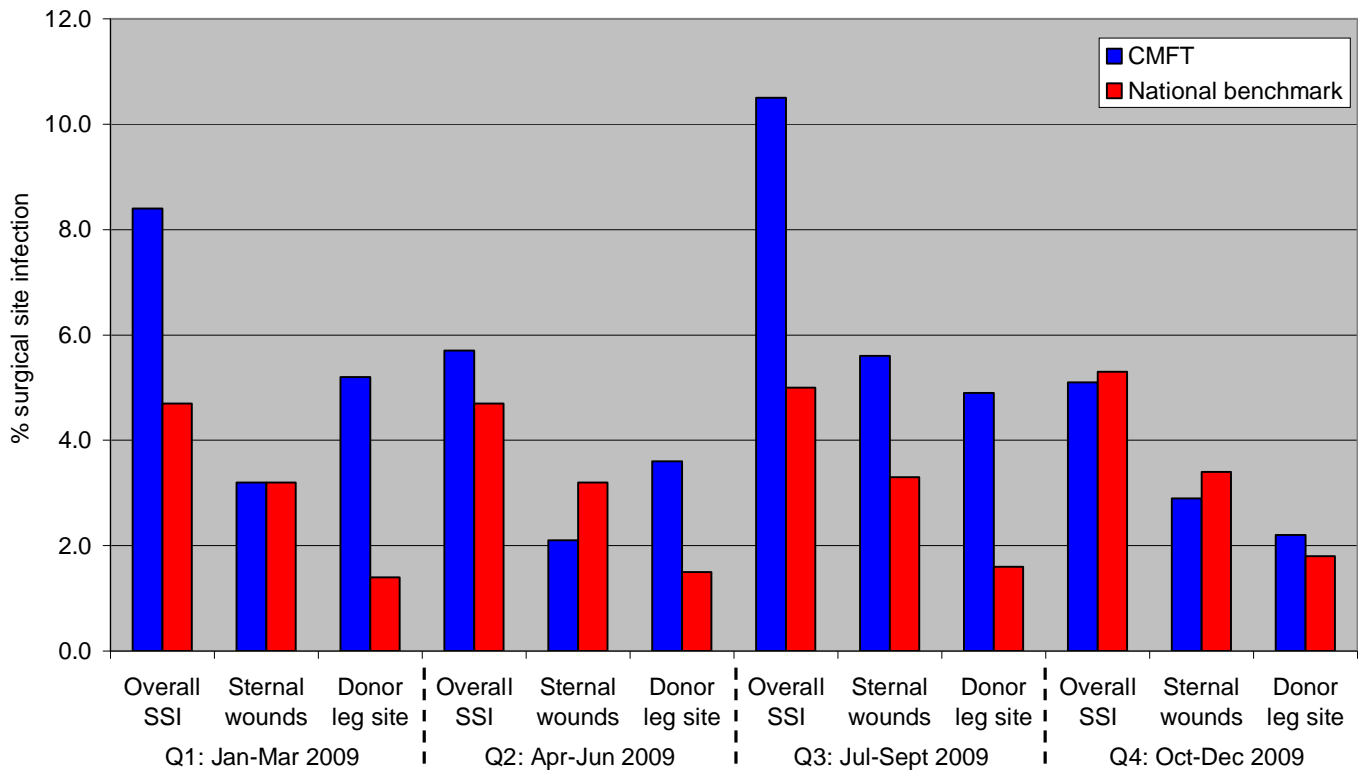
### 4.6.1 Coronary Artery Bypass (CABG) Surgery SSI

The Trust have matched or bettered the benchmark for sternal wound infections post CABG for three of the four quarters of the year. However, overall the Trust has been above the national benchmark for SSI in CABG procedures for the first three quarters of the surveillance year. This has been due to the donor leg site wounds which have been repeatedly above the national benchmark. This is currently being addressed by a sub-group, looking at specific measures aiming to reduce our rate of infection.

#### Coronary Artery Bypass Graft

Quarter	Time period	Overall SSI rate		Sternal wounds		Donor leg site	
		CMFT (%)	National benchmark (%)	CMFT (%)	National benchmark (%)	CMFT (%)	National benchmark (%)
Q1	Jan-Mar 09	8.4	4.7	3.2	3.2	5.2	1.4
Q2	Apr-Jun 09	5.7	4.7	2.1	3.2	3.6	1.5
Q3	Jul-Sep 09	10.5	5.0	5.6	3.3	4.9	1.6
Q4	Oct-Dec 09	5.1	5.3	2.9	3.4	2.2	1.8

Rate of SSI - Heart Centre



#### 4.6.2 Knee Replacement Surgery SSI

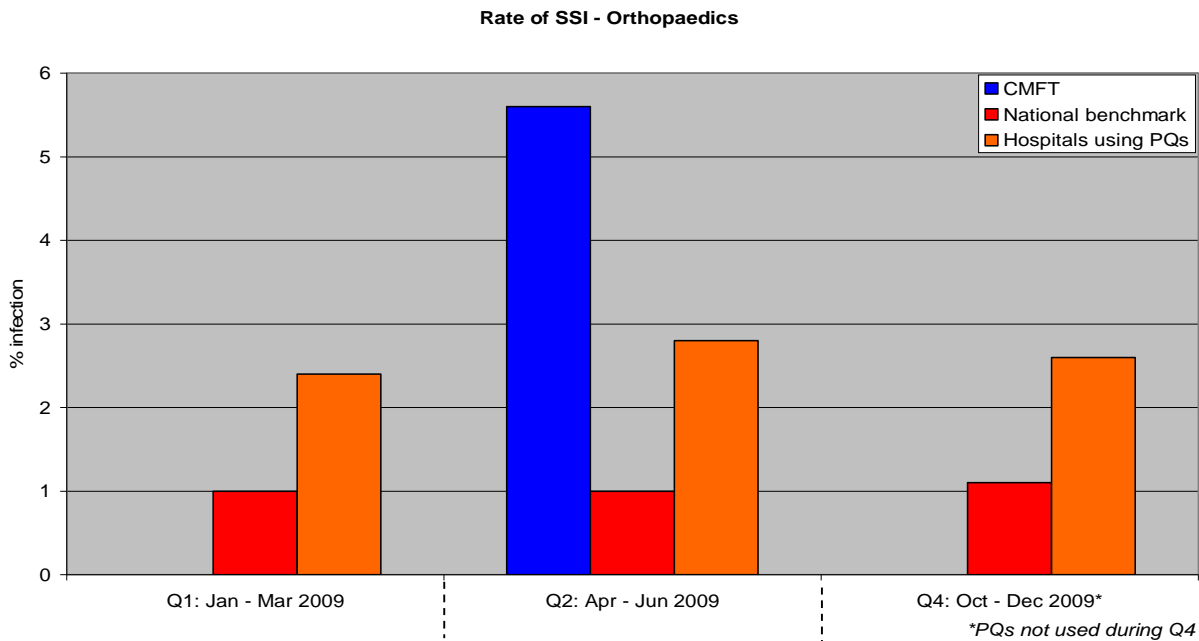
One of the key limitations of the SSI surveillance in the acute setting has been that wound infections may not be manifested whilst the patient is an in-patient. As a consequence the national surveillance scheme introduced patient-questionnaires (PQs) used to determine if a SSI has occurred post-discharge in patients following knee replacement surgery. The orthopaedic department implemented the use of PQ's in two of the three quarters that data was collected.

The rate for the 2<sup>nd</sup> quarter of 2009 rose above the national benchmark. It should be noted however that this result is based on a low number of patients and that further surveillance is required to establish if this is a continued trend.

The Trust is required to submit only one quarter of data per year to comply with the mandatory reporting. Orthopaedic reporting was completed for Q1, Q2 and Q4.

##### Knee replacement surgery

Quarter	Time period	Overall SSI rate		
		CMFT (%)	National benchmark (%)	Hospitals using PQs (%)
Q1	Jan-Mar 09	0.0	1.0	2.4
Q2	Apr-Jun 09	5.6	1.0	2.8
Q4	Oct-Dec 09	0.0	1.1	2.6



### **4.6.3 Service Improvements/ Initiatives to Reduce the Incidence of HCAI**

In line with guidance from the Department, from October 2010 a review of all patients with CDI commenced. The review is undertaken by a Consultant Microbiologist and the Antibiotic Pharmacist.

From October 2009 a referral service for Consultant Microbiologist and Antibiotic Pharmacist review was set up for management of patients with complex infections. Referrals are made via an online database accessed via the Microbiology intranet page. The development of this service was met with very positive feedback from medical staff. However, the number of referrals made remains low.

The Trust Quality Campaign was launched in May 2009. There are two themes related to infection prevention and control in the category of patient safety;

- The prevention and reduction of CDI.
- The prevention and reduction of the incidence of surgical site infection.

The Campaign themes focussed with the divisions of Medicine and Surgery.

The Trust commenced participation in the national Matching Michigan Project in December 2009 and has been confirmed as a pilot site for neonatal services.

## **4.7 Outbreaks of Infection**

### **4.7.1 Measles Outbreak**

In early 2009, there was a measles outbreak in Greater Manchester, which followed a national pattern. Between March and May 2009, the Greater Manchester Health Protection Unit was notified of 40 suspected cases; 29 cases were confirmed as measles.

An updated policy for the management of suspected or confirmed cases of measles was issued by the Trust IPCT in March 2009 and a series of meetings were held with relevant clinical Departments to inform them about the policy. In total, 18 suspected cases and 8 confirmed cases attended CMFT, with 3 being admitted; none were seriously ill.

The outbreak probably terminated because of a sustained catch-up immunisation campaign in the community. Within the Trust, the infection control guidance was generally well adhered to; occasional suspected cases are still being seen and there is a need to maintain vigilance.

#### 4.7.2 Pandemic influenza

On 11 June 2009, the World Health Organisation declared an influenza pandemic, following the emergence of a novel influenza A virus, now known as Pandemic (H1N1).

During the rest of 2009 and into the early part of 2010, CMFT conducted a series of activities to manage the local consequences of the pandemic, including the clinical management of patients and the establishment of a novel programme for staff vaccination and its delivery. This entailed writing algorithms and policies for the management of suspected or confirmed cases of pandemic influenza and updating them as the national guidance on which they were based changed.

Large numbers of staff were trained in the use of personal protective equipment (PPE), in particular, the high efficiency FFP3 respirator masks specifically recommended by national guidelines for this strain of influenza A.

Extensive series of meetings was held with relevant clinical Departments within the Trust to inform them about the local guidance, and regular informal meetings were held to keep staff up to date with developments.

By the end of March 2010, the Trust had treated over 500 suspected cases of pandemic influenza (excluding those seen and discharged directly from the Emergency Departments); 141 of these patients were confirmed cases on laboratory testing and required varying levels of clinical intervention for their management.

The first confirmed case was seen in early July 2009; activity peaked in mid-November, with 17 in-patients who were confirmed cases, including seven who required critical care; it subsequently declined and the last confirmed case was discharged towards the end of February. Nationally, activity is currently low and stable.

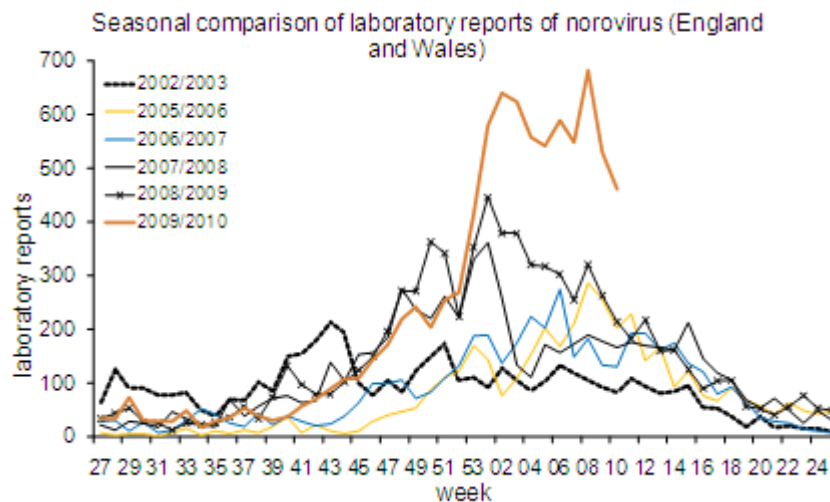
#### 4.7.3 Norovirus Outbreaks April – October 2009

There were three isolated outbreaks of norovirus between April and October 2009 (see table below). All three outbreaks were contained.

Ward	Dates of Closure	Number of days closed	Number of patients affected	Number of staff affected	Number of cases confirmed by PCR	Bed days lost
Liebert	11 <sup>th</sup> – 15 <sup>th</sup> April '09	5	6	0	0	75
Heywood	1 <sup>st</sup> – 6 <sup>th</sup> May '09	6	9	3	1	108
33	10 <sup>th</sup> -13 <sup>th</sup> Oct '09	4	9	2	5	108

#### 4.7.4 Norovirus Outbreaks January – March 2010

Nationally, norovirus activity during the winter of 2009-2010 has been 34% higher than for the previous year, based on laboratory reports to the Health Protection Agency; most of this increase is due to a surge in the number of reports since the beginning of 2010 (see chart below).



To date, 19 outbreaks have occurred at CMFT during 2010 (please see summary of outbreaks below): Initially the decision to close the wards was made on clinical factors; however 15 of the 19 outbreaks have been confirmed by laboratory testing.

The current national guidelines suggest that affected wards do not re-open until 72 hours after the last patient in an outbreak became symptomatic. In practice, affected wards were being cleaned after 48 hours and opened 12 to 24 hours later due to bed pressures. However, the number of recurrent outbreaks lead to a decision to defer starting cleaning until 72 hours, with the aim of improving control of the spread of the infection and avoiding further re-closure of the same wards. There were no further recurrent outbreaks on affected wards since this change in approach was implemented.

Following an outbreak of norovirus, the effectiveness of the deep clean prior to re-opening the ward is a key factor in reducing the risk of re-closures. Experience from the outbreaks suggested that there needs to be a more streamlined approach to the cleaning process, with clear lines of responsibility and supervision on the part of both nursing staff and Sodexo cleaning services. This issue is currently being addressed through a group led by the Associate Director of Estates and Facilities.

## Summary of Norovirus Outbreaks January – March 2010

Ward	Dates of closure	No. days closed	No. patients affected	No. staff affected	No. cases confirmed by PCR	Bed days lost
12	7-11 Jan	5	12	1	0	140
45	26 Jan - 1 Feb	6	13	2	6	168
15	7 - 10 Feb	4	13	1	8	108
37	8 - 15 Feb	8	15	1	9	192
AM2	10 - 17 Feb	8	15	7	6	224
16 (Trafford)	12 - 17 Feb	6	9	3	0	96
AM1	15 - 20 Feb	6	10	5	1	168
31	17 - 25 Feb	9	10	2	6	234
32	18 - 24 Feb	7	9	4	2	112
36	19 - 22 Feb	4	11	2	0	80
AM3	19 - 22 Feb	4	9	2	3	112
AMCD	24 - 28 Feb	5	11	1	3	65
32	28 Feb - 4 Mar	5	3	1	0	80
45	2 - 8 Mar	7	10	1	5	196
AM3	3 - 12 Mar	9	17	3	1	252
46	7 - 16 Mar	9	17	6	5	252
79	10 - 15 Mar	5	10	0	3	140
84	9 - 24 Mar	6	9	0	3	168
7	26 Mar - 5 Apr	11	8	7	8	308
<b>Totals</b>		<b>124</b>	<b>211</b>	<b>49</b>	<b>69</b>	<b>3095</b>

### 4.7.5 Outbreak of MRSA Amongst Patients on Ward One

Between 14th September- 23<sup>rd</sup> - November 2009 thirteen patients acquired MRSA whilst in-patients on Ward One. The ward was closed to admissions on Friday 6<sup>th</sup> November 2009, prior to the ward closure 6 patients acquired MRSA during a two month period.

The ward moved to a refurbished ward on 30/10/09 and following this move a further 7 patients acquired MRSA over a short period of time (6.11.09 – 18.11.09).

Control measures instigated included an Infection Control Nurse working on ward to support and educate all staff, screening of all patients and staff, additional cleaning hours from Sodexo, specimens sent for typing and isolation of MRSA positive patients.

The progress of the outbreak was closely monitored and the ward re-opened on Monday 23<sup>rd</sup> November 2009 as the criteria for reopening had been met. No new cases had been identified from two consecutive MRSA screens and any patients who were MRSA positive were isolated in single rooms. In total 126 bed days were lost.

### 4.7.6 Other Activities

The IPCT were also involved in the following;

- A Pseudo outbreak of MRSA on the Neonatal Medical Unit

- Investigation of cases of endo-ophthalmitis in the Royal Eye Hospital
- Identification and follow-up of a staff member with open Mycobacterium tuberculosis on NICU

## **SECTION 5: DECONTAMINATION SERVICES**

The Trust appointed Lead for Decontamination is Mark Fisher, Associate Director of Estates and Facilities.

### **5.1 External Review**

5.1.1 A full external review of decontamination was completed in October 2008 by an Independently Registered Authorised Engineer for Decontamination and Consultant Microbiologist. The review, which highlighted many areas of good practice and also a number of recommendations for improvement, has been reviewed again during 2009 to ensure that all outstanding actions and recommendations have been actioned and implemented.

5.1.2 During this year, the Trust appointed Dr. J. A. Kerry as Authorised Engineer (Decontamination). This was a joint appointment with Sodexo and Project Co. Dr Kerry sits as a substantive member of the Trust Decontamination Monitoring Group.

5.1.3 A process and workflow audit has been completed in all Trust Endoscopy Service Departments and Facilities. This report is being used to inform the Trust full business case for the centralisation of satellite endoscopy services into the Decontamination Services Department, and the infrastructure upgrade of the Trust central Endoscopy Department. Submission of the full business case is expected by the end of April 2010, and subject to funding, work will commence during 2010 / 11.

### **5.2 Transfer of Services and Move to New Hospital Development**

5.2.1 The Decontamination and Sterilization Department (DSD) transferred to the new hospital development early in 2009. This move provided state of the art bespoke equipment and accommodation, and has also increased the capacity of the department.

5.2.2 Decontamination Services from Royal Manchester Children's Hospital (Booth Hall) transferred into DSD during June 2009.

### **5.3 Decontamination Group**

5.3.1 The Trust Decontamination Services Monitoring Group was inaugurated in September 2009.

- 5.3.2 The multi-disciplinary group also includes representatives from Trust Estates and Facilities team, Sodexo and the IPCT. To date it has:
- Agreed Terms of Reference and meets quarterly
  - Focused on the requirements for the decontamination of re-useable Medical Devices
  - Developed, agreed and ratified a Trust Decontamination Policy Document
  - Reported regularly to the Trust Infection Control Committee

#### **5.4 Review of Local Re-processing of Endoscopes**

Local re-processing of endoscopes occurred in several departments within the Trust.

- 5.4.1 The Endoscopy Unit was reviewed by the Joint Accreditation of Gastroenterologists and will be accredited following implementation of suggested recommendations.
- 5.4.2 Following a review of current service provision in other areas of the Trust a dedicated Decontamination Group has been convened to develop Trust Business Case for the Centralisation of Endoscopy Services in DSD, and for the upgrade of service feeds and facilities in the Central Endoscopy Department.

### **SECTION 6: CLEANING SERVICES**

#### **6.1 Management Arrangements for Cleaning Services**

- 6.1.1 The Trust contracted out cleaning services in October 2008 to Sodexo Healthcare as part of the PFI Project Agreement. This contract is managed and monitored by the Facilities Monitoring Team who report to the Associate Director of Estates and Facilities who in turn reports to the Director of Nursing (Adults).
- 6.1.2 The contract is managed in accordance with the Project Agreement, with specific reference to Schedule 14 which provides the Trust specification requirements and the method statements which are to be followed by Sodexo Healthcare.
- 6.1.3 The Facilities Monitoring Team has developed a Contract Monitoring Procedure that sets out the monitoring arrangements and contract management procedures to ensure that standards are robustly reviewed against the standards required.
- 6.1.4 During 2009/2010 the New Hospital Development became operational which included the move of the Children's Hospitals (Booth Hall and Pendlebury) onto the Central site, and the transfer of cleaning staff from

Medirest to the management of Sodexo. St Mary's Hospital and the Royal Eye Hospital moved to new accommodation.

- 6.1.5 Whilst the New Hospital Development has provided improved facilities in terms of build and design there have also been considerable cultural and training challenges to be addressed to ensure the maintenance of a safe and clean environment. The Trust has continued to work in partnership with Sodexo Healthcare to ensure that these challenges have been identified and services developed.
- 6.1.6 Sodexo Healthcare provided a monthly performance report which summarized their performance, based on their self monitoring regime, against agreed performance standard indicators. This has been analyzed and where appropriate challenged by the Facilities Monitoring Team. The analysis undertaken was based on information collation from a number of sources to confirm that the data provided reflected the experience of the Trust.
- 6.1.7 The performance standard indicators reported on service delivery against specific measures looking at quality standards or response times. Any areas of non-performance were subjected to financial penalties applied as a percentage of the monthly payment made by the Trust.

**6.2 Annual Patient Environment Assessment Team (PEAT) Assessment January 2010**

The outcomes of the PEAT Assessment for 2010 are as illustrated in the table below, although it should be noted that these have not yet been confirmed by the National Patient Safety Agency (NPSA).

- 6.2.1 These results reflect comparable results in 2009. In previous years the Trust has completed four separate assessments for Booth Hall and Royal Manchester Children's Hospitals, St Marys Hospital and the Manchester Royal Infirmary and Royal Eye Hospitals. In 2010, due to the centralisation of all Hospitals onto a single site one single assessment was undertaken.

<b>Environment</b>	<b>Food</b>	<b>Privacy &amp; Dignity</b>
GOOD	GOOD	GOOD

## **SECTION 7: AUDIT**

The Health Act (2006) requires that NHS organisations audit key policies and procedures for infection prevention and control in order to provide assurance that clinical practice is effective in the prevention of HCAI's.

### **7.1 Audit of Clinical Practice**

Local evidence suggests that the main contributing risk factors towards reducing the risk of HCAI are good hand hygiene, practice of asepsis during clinical procedures and monitoring of in-dwelling peripheral venous catheters.

#### **7.1.2 Hand Hygiene Audits**

All clinical areas within the divisions conducted weekly audits of opportunities for hand hygiene and submitted the results to the IPCT. These results were then aggregated into a monthly report by the Trust Audit Department and feedback to the divisions and the DIPC. The annual results for each division can be seen in appendix 3, fig 1.

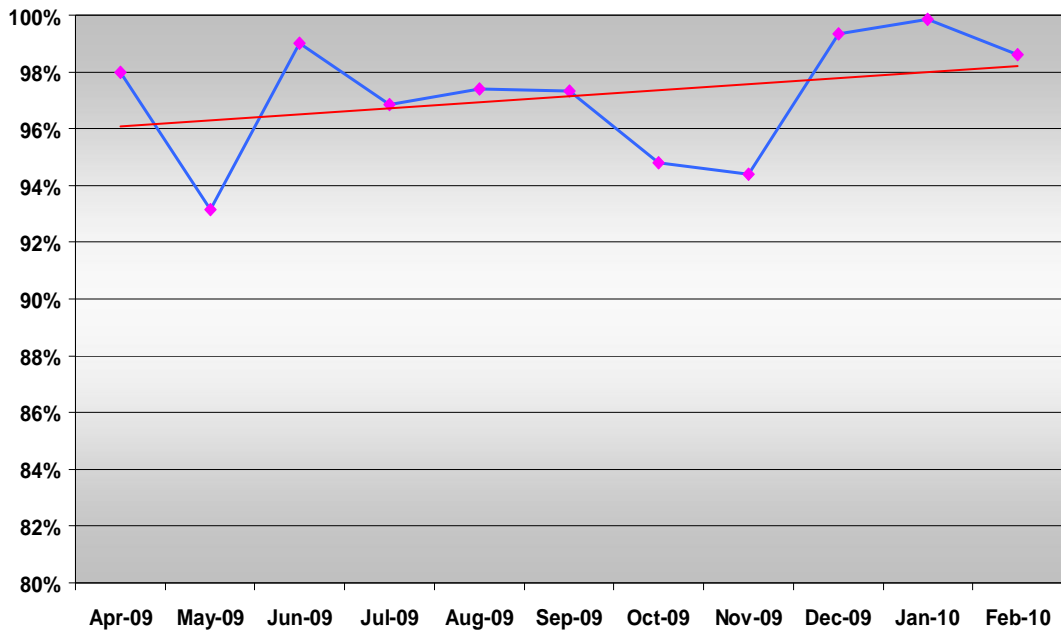
7.1.2.1 The trend for hand hygiene indicated an increased compliance from 94% to 97% for 2009/10 and although there is some variation all divisions demonstrated an improvement in their level of compliance compared to their performance at the beginning of the year.

#### **7.1.3 Aseptic Non-Touch Technique (ANTT) and Visual Inspection of Phlebitis (VIP) score Audits.**

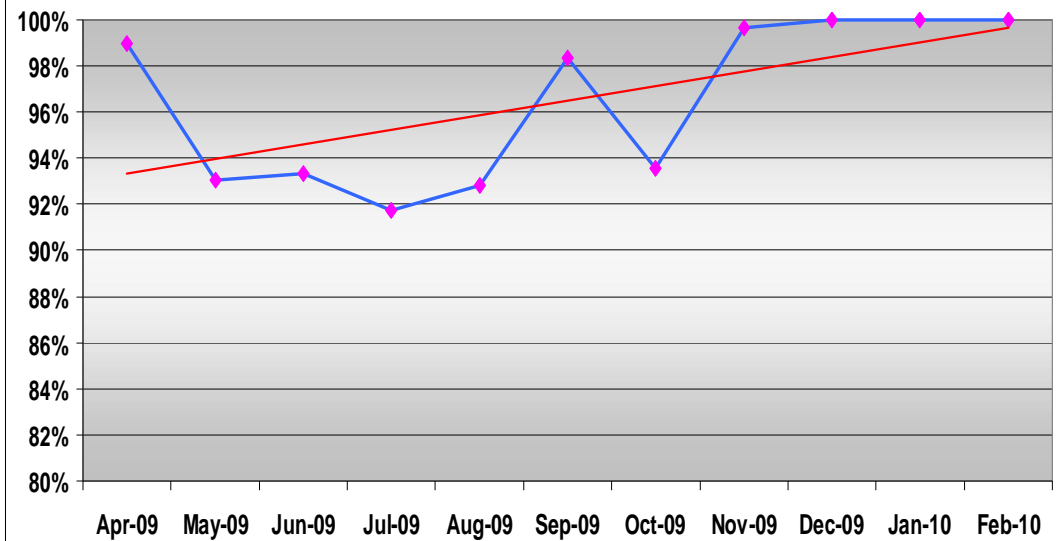
7.1.3.1 The divisions of Medicine and Surgery are the Trusts highest risk areas for the incidence of HCAI. In addition to the hand hygiene audits these clinical areas also undertook monthly audits of ANTT practice and VIP scores. Results were aggregated by the Audit Department and feedback to the divisions and DIPC.

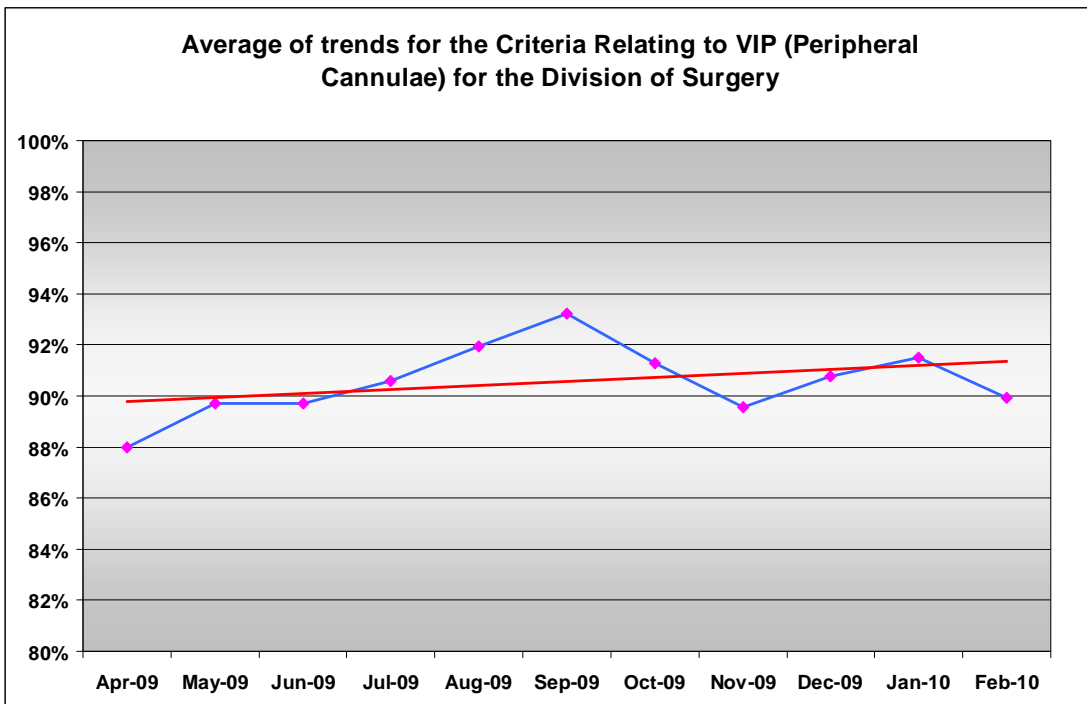
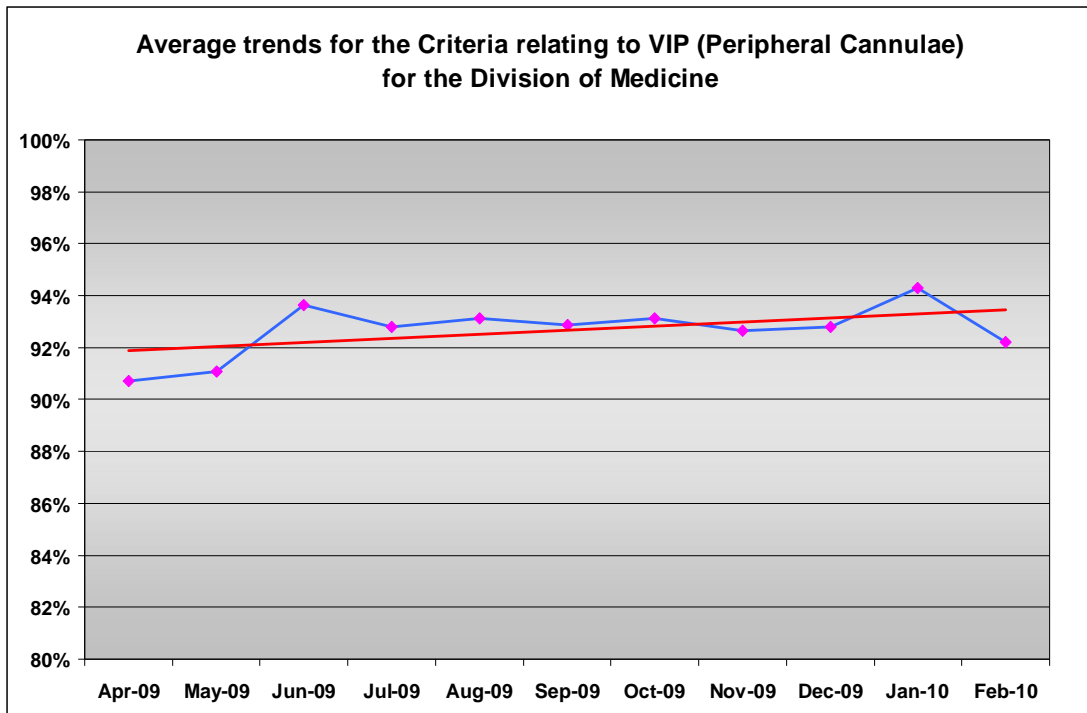
7.1.3.2 The graphs below show the average results for audit of ANTT and VIP scores in the Divisions of Medicine and Surgery. Results demonstrate a positive trend over the year however, they are based on a small sample size per ward. Lessons have been learnt and a larger sample size will be used for the 2010/11 programme.

**Average results for Audit of ANTT Trends in Division of Medicine**



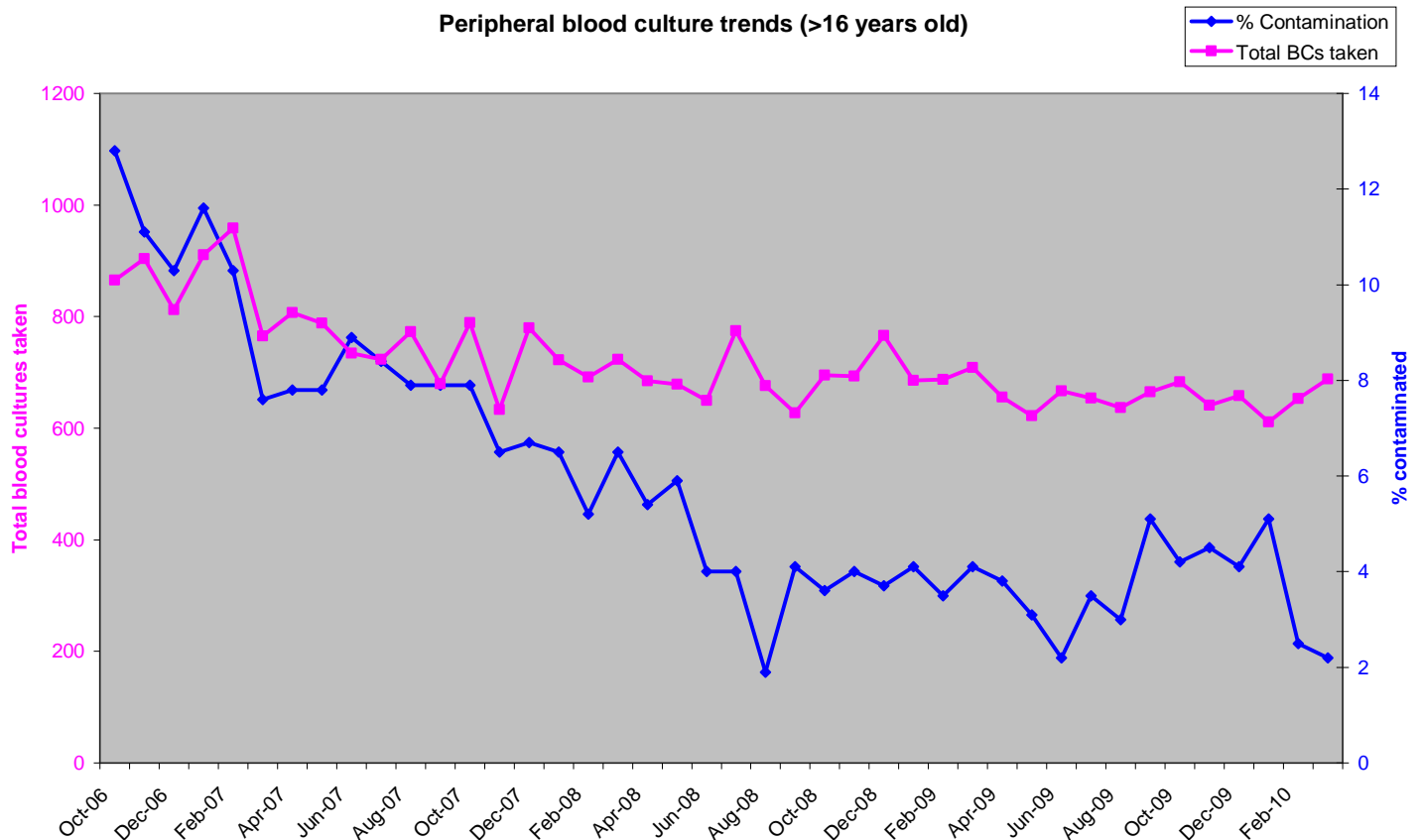
**Average results for Audit of ANTT Trends in Division of Surgery**





*Please see appendix 3, fig 2 and fig 3 for detailed results for the Division of Medicine and fig 4 and fig 5 for detailed results for the Division of Surgery.*

## 7.2 Audit of Blood Culture Contamination Rates



7.2.1 In adults, from October 2006 to March 2010 the trend in blood culture contamination has substantially declined from over 12% in 2006, to 2-5% in 2009/10. This is testament to the trust-wide implementation of the general principles of ANTT in January 2007 and specifically the revised blood culture taking protocol in January 2008.

7.2.2 Reducing blood culture contamination has reduced unnecessary antibiotic usage, and improved specificity of blood cultures to detect true infection.

### 7.3 Antibiotic Policy / Prescribing Guidelines

The Trust-wide guidelines were updated in August 2009, and comply with Department of Health recommendations in relation prudent antibiotic prescribing. Specific updates for 2009 included:

- Antibiotic surgical prophylaxis for minimisation of surgical site infection. In March 2010 the Surgical Division agreed to an action plan to improve compliance with these guidelines. A series of audits is planned to monitor the progress

- Treatment of *Clostridium difficile* infection (CDI), including updated recommendations for severe disease. Compliance with these recommendations is monitored by review of patients on the CDI ward round and at the Infection Control KPI meeting.

### 7.3.1 Audit of Antibiotic Prescribing Guidelines

A series of audits has been undertaken to assure compliance with Trust guidelines and policies.

The Trust wide point prevalence audit was performed in December 2009. Compliance with the guidelines has been sustained (please see table below)

	<b>2006 audit (Central site)</b>	<b>2007 audit (Trust wide)</b>	<b>2008 audit (Trust wide)</b>	<b>2009 audit (Trust wide)</b>
Compliant	56%	79%	75%	74%
Compliant but Justified	7%	4%	3%	14% (combined with compliance NA)
<b>Non-compliant</b>	21%	9%	12%	12.8%
Compliance N/A	16%	8%	10%.	

The results of the audit were disseminated to divisional clinical governance leads for development of division specific action plans. Trust wide actions focus on:

- Improving documentation of intended durations / review dates to a minimum of 50% by June 2010 aiming for further improvement in subsequent re-audits.
- Increasing uptake for education and training for infections and antibiotic management. The ICC antibiotic subgroup has recommended to divisional clinical governance leads that 60% of all medical staff across the division to complete the Trusts e learning antibiotic package within 3 months.

### 7.3.2 Audit of Restricted Antibiotic Agents

An audit of procedures for prescribing antibiotic agent restricted to microbiology approval demonstrated compliance of 93%. Non-compliance was related to isolated cases. No further actions for the system of restricting agents have been identified.

#### **7.4 Trust Wide MRSA Screening Prevalence Survey - January 2010**

A trust wide prevalence survey was undertaken to measure compliance with the Trust MRSA screening policy.

Overall results:

- 224 sets of patients' documents included of which 200 were compliant with the screening policy.
- Overall compliance trust wide is 89%
- 29 wards, of 44 inpatient wards, were fully compliant with screening patients in line with the policy however not all areas were using the trust MRSA screening proforma. This is currently being addressed.

#### **7.5 Audit of Disposal of Sharps**

7.5.1 On the 30th June 2008 a Trust wide audit was undertaken within CMFT by Frontier Medical to establish the sharps practice within the trust. Overall the audit found that the sharps practice within the trust was below average.

7.5.2 A subsequent audit undertaken on the 28<sup>th</sup> September 2009 illustrated a vast improvement in all areas audited however further progress needs to be achieved. An action plan was put in place by the waste management team in conjunction with Infection Control to enforce basis sharps awareness and practice within the Trust.

### **SECTION 8: EDUCATION & TRAINING ACTIVITIES**

8.1 The IPCT delivered training on the key principles of Infection Prevention & Control at Corporate Induction and Corporate Clinical and non-Clinical Mandatory training. The content of the training is in accordance with the core care policies identified within the Hygiene Code, revised 2009.

8.2 The e-learning packages for Corporate and Clinical Mandatory training were introduced during this last year after they were both piloted. Feedback to date has been very positive.

8.3 In August this year the IPCT arranged a series of Induction Sessions for all new medical staff including the basic principles of hand hygiene, use of personal protective equipment and the principles of ANTT. Each doctor was then ANTT competency assessed in their clinical environment.

8.4 The IPCT organised an Infection Prevention & Control Study Day for all staff in September 2009. The event was attended by 62 delegates, and included a range of topics delivered by both internal and external speakers. The feedback was very positive.

- 8.5** The Antibiotic Pharmacist has led the development of an e-learning package on management of infection. It was implemented in a phased roll-out as part of mandatory training for all medical staff.

## **SECTION 9: RESEARCH AND INNOVATION**

### **9.1 The Showcase Hospitals Project**

The Trust was selected by the Department of Health to be a Showcase Hospital Trust in 2008. A brief summary of the projects for 2009/10 can be found below.

#### **9.1.1 Hand Hygiene DVD**

As a participant in the Showcase Programme, the Trust was commissioned to develop a Hand Hygiene DVD for training purposes. The DVD was made in collaboration with a production company, the Nurse Consultant for IP&C was involved in the production team as a specialist advisor and the DVD was filmed at CMFT using staff from the Trust.

The DVD was launched nationally at the Chief Nursing Officers Meeting in April 2009 and has since been widely distributed (by request) across the UK and internationally.

#### **9.1.2 Evaluation of Skin Sealant to Reduce the Risk of Surgical Site Infection**

The in use evaluation of InteguSeal was conducted between 3<sup>rd</sup> August and 1<sup>st</sup> December 2009 in the orthopaedic and cardiac theatres. The post use evaluations have been submitted to the Department of Health. The feedback from the Cardiac consultants was positive and they are continuing to use it. Some of the Orthopaedic consultants are also continuing to use it.

#### **9.1.3 Evaluation of Diagnostic Strategies**

The Trust is currently evaluating the impact of a Polymerase Chain Reaction (PCR) test for the detection of *Clostridium difficile*. To date over 3,000 tests have been completed. This trial will look at the clinical impact, that is, the time to isolation/treatment and also to determine the best algorithm for laboratory diagnosis of *Clostridium difficile* using multiple tests.

#### **9.1.4 The Manchester Showcase Hospitals Study Day**

The Manchester Showcase Hospitals Study day was held at Old Trafford on 20<sup>th</sup> October 2009. The event was well attended by representatives from the Trust and neighbouring organisations with a broad range of speakers who spoke of innovations to prevent healthcare-associated infections. Overall it was a great success with very positive feedback.

## **9.2 Research and Innovations Implemented and Supported by the IPCT**

The IPCT were also actively involved in developing other new technologies to prevent and reduce the incidence of HCAI.

### **9.2.1 Evaluation of a Novel Disinfectant**

The Trust IPCT have recently co-ordinated a ten month in-use evaluation of a novel disinfectant on four acute medical wards where there was known to be a high risk of *Clostridium difficile* Infection and MRSA. Results of the trial are expected to be published in the near future.

### **9.2.2 New Test for Laboratory Detection of MRSA**

As part of the Department of Health Smart Solutions Programme the Trust IPCT also undertook a four month trial of a novel rapid nucleic acid amplification test for MRSA. The trial was conducted across the Divisions of Medicine and Surgery. This was the first time this technology had been used on patient samples.

## **SECTION 10: TARGETS AND OUTCOMES**

### **10.1 Internal Audit Report of compliance with the Hygiene Code**

As part of the agreed audit plan for 2008/09, a review of the Trust's arrangements for compliance with the Health Act 2006 – 'The Hygiene Code' was carried out.

The overall objective was to determine whether adequate systems and processes were in place to ensure that the Trust achieved compliance with the Hygiene Code, as amended in January 2009.

From the results of audit testing a significant level of assurance was given that the Trust had appropriate controls and systems in place to achieve compliance with the Hygiene Code and manage instances of HCAs. It was considered that on the whole, a sound system of controls had been consistently applied. Minor inconsistencies occurred but there was no evidence to suggest that the system objectives had been put at risk.

## **10.2 The Care Quality Commission (CQC) Unannounced Inspection**

On 13th January 2010 the Trust had an unannounced inspection from the CQC to assess compliance with regulation on HCAI's and the supporting Code of practice. 15 measures of the Code were assessed.

This visit was a follow up to the unannounced visit by the previous Health Care Commission in October 2008.

The Trust declared compliance against the Hygiene Code for 2009/10

### **10.2.1 The Inspection**

The final report of the inspection found that the Trust was considered compliant in 13 of the 15 measures. The Trust was found to have breached the Code on criteria 2 guidance 2e and 2h (see below) and received a recommendation and a requirement respectively.

- 2e –Ensure that the environment for providing healthcare is suitable, clean and well maintained
- 2h - Effective arrangements for the appropriate decontamination of instruments and other equipment which are detailed in appropriate policies

### **10.2.2 The Trust Action Plan**

An action plan was devised with the appropriate partners including Sodexo led by the Nurse Consultant for Infection Prevention and Control which included immediate and more long-term measures to meet the CQC requirement and recommendation (see appendix 4).The CQC made two follow-up visits to the Trust in February and March 2010 and were satisfied with that their recommendation and requirement had been achieved.

## **SECTION 11: CONCLUSION**

This has been an outstanding year for Infection Prevention and Control in CMFT. Against a back ground of increased numbers of admissions, re-location to the new hospitals and the test of unpredictable events, such as the potential impact of pandemic influenza and the actual impact of norovirus outbreaks, the Trust exceeded requirements for performance against HCAI targets.

The scope of infection prevention and control has begun to broaden to encompass specific local issues such as decontamination of endoscopes and the incidence of surgical site infection in cardio-thoracic patients. These achievements have contributed towards continuing to improve the quality of care for our patients at CMFT.

Julie Cawthorne  
Nurse Consultant, Infection Prevention & Control  
Central Manchester University Hospitals NHS Foundation Trust



## INFECTION CONTROL COMMITTEE TERMS OF REFERENCE

### 1. CONSTITUTION

The Infection Control Committee is a sub committee of the Clinical Effectiveness Committee (Appendix 1). The Infection Control Committee is chaired by the Director of Infection Prevention and Control who is the Chief Nurse/Director of Patient Services

### 2. MEMBERSHIP

- Director of Infection Prevention and Control/Director of Patient Services/Chief Nurse
  - Consultant Microbiologist/Infection Control Doctor
  - Nurse Consultant, Infection Prevention and Control
  - Lead Nurse, Infection Prevention and Control
  - Consultant Virologist
  - Consultant Microbiologists
  - Consultant Physician Occupational Health
  - Antimicrobial Pharmacist
  - Director of Nursing (Adults) or deputy
  - Director of Nursing (Children) or deputy
  - Consultant Physician for Respiratory Medicine
  - Associate Director of Clinical governance
  - Head of Patient Safety and Risk Management
  - Head of Clinical Audit
  - Trust Decontamination Lead
  - Medical Division Representative
  - Surgery Division representative
  - Eye/Dental Division representative
  - Saint Mary's Division representative
  - Consultant Communicable Disease Control
  - PCT Infection Control Lead
  - Manchester Mental Health Services
- 
- Other Members of the Trust or partner organisations may be co-opted to the Infection Control Committee at the invitation of the Chair
  - A quorum shall be eight members including the Director of Infection Prevention and Control (or a nominated deputy), and two representatives from the Infection Control Team

### **3. ATTENDANCE AT MEETINGS**

- The Infection Control Committee may require from time to time, the attendance of any Trust employee (or agent of the Trust) to attend the committee at the request of the Chairwoman

### **4. FREQUENCY OF MEETINGS**

- The Infection Control Committee will meet every two months (six times a year)

### **5. OVERVIEW**

- The purpose of the Infection Control Committee is to provide a two-way communication channel between the Trust Board and Infection Control.
- The Infection Control Committee is authorised to formulate recommendations for Infection Prevention and Control within the Trust and to convey these to the Trust Board.

### **6. SCOPE AND DUTIES**

- To ensure the infection control strategy and all infection control policies, procedures and guidelines are in place, relevant and up to date with noted guidance.
- To provide advice and support on the implementation of the strategy and policies
- To collaborate with the Infection Control Team to produce guidance on the Trust's Annual Infection Control objectives, from which the Divisions create an Infection Control Plan and the Infection Control Team a Corporate Action Plan.
- To monitor progress of the objectives described in the Corporate Infection Prevention and Control Action plan
- To monitor Trust wide trends of alert organisms and alert conditions and advise the Divisions, PFI and Infection Control Team on actions.
- To consider reports on infections and infection control problems
- To ratify the Annual Infection Control Board Report

- To draw the attention of the Chief Executive, through the Director of Infection Prevention and Control, to any serious problems or hazards relating to infection prevention and control
- To describe, review and monitor the principle and significant risks related to infection control on behalf of the Trust and present these with the plan of controls to the Trust Significant Risk Review Group and Risk Advisory Committee at least annually.
- Members will disseminate relevant information to their clinical areas
- To receive for information the Divisional performance reports against their Action Plans (annually)

## **7. AUTHORITY**

The Infection Control Committee is empowered to examine and investigate any activity within the Trust pursuant to the above scope and duties.

## **8. REPORTING**

9. The Infection Control Committee reports to the Clinical Effectiveness Committee (see CMFT Clinical Governance Organisational Chart appendix 1)

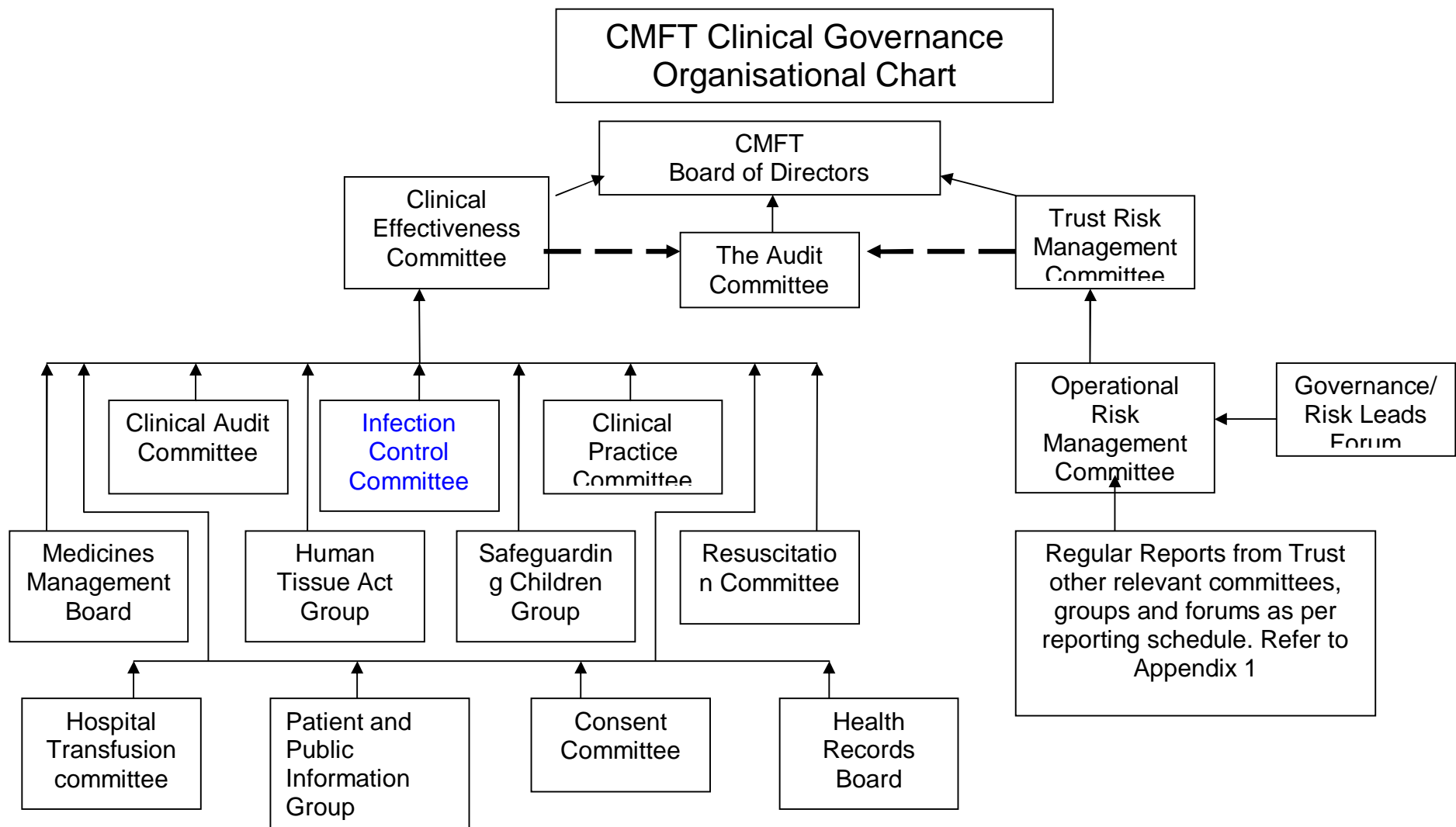
10. There are four sub-groups of the Trust Infection Control Committee (See Infection Control Committee structure appendix 2). The Chair persons from each of the sub-groups, (Or their nominated deputy), provide a verbal report at each Infection Control Committee meeting

## **11. REVIEW**

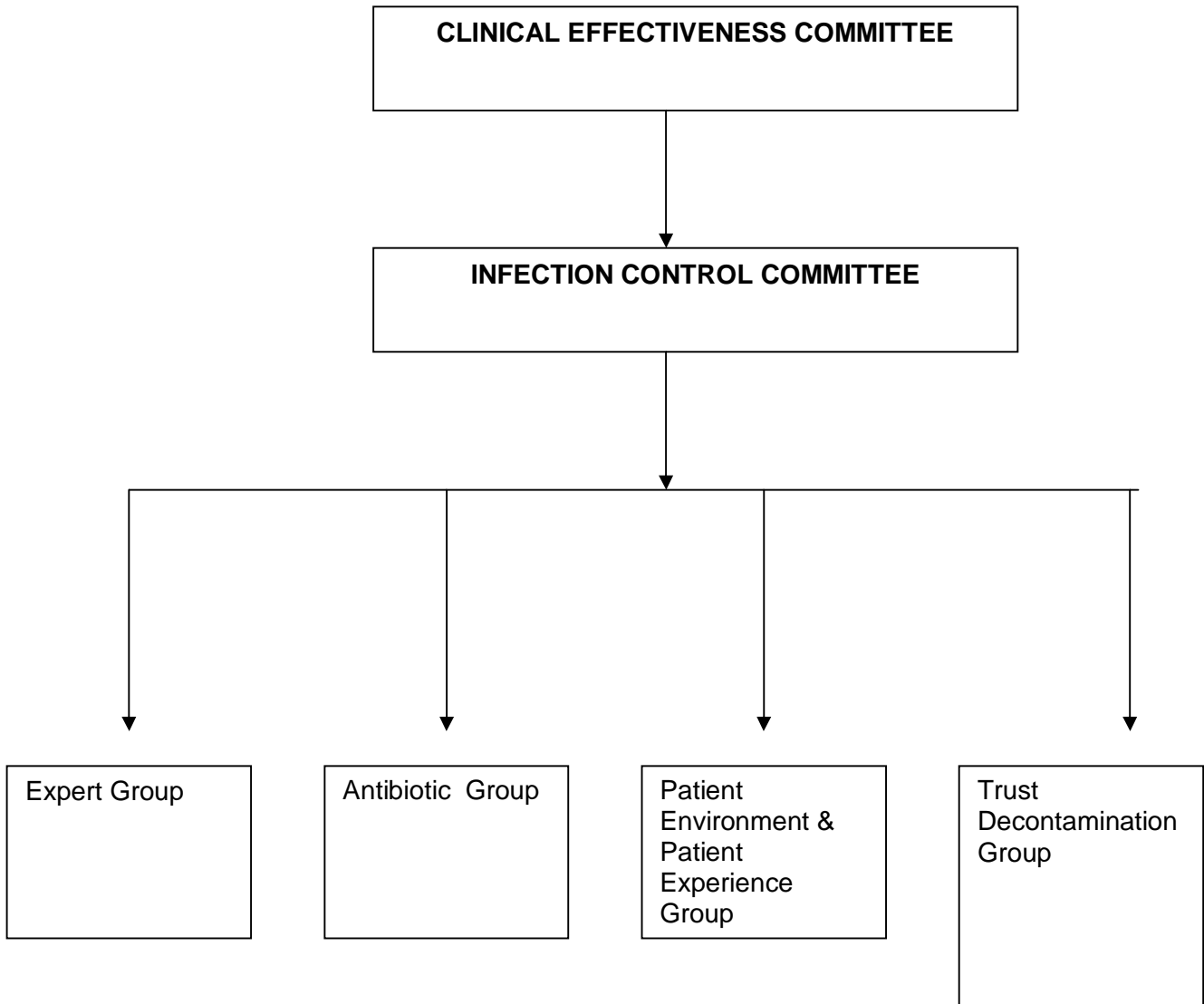
These Terms of Reference will be reviewed in April 2011

## **12. KEY PERFORMANCE INDICATORS**

- Attendance of the Infection Control Committee will be audited annually, members are expected to attend (or send a nominated Deputy) to a minimum of four out of six meeting per year.
- Minutes and reports of the Infection Control Committee
- The Annual Infection Control Report will demonstrate the key activities and performance made Trust wide in infection control
- Care Quality Commission annual assessment of compliance against the Health Act (2006)
- Terms of Reference for Infection Control Committee reviewed annually

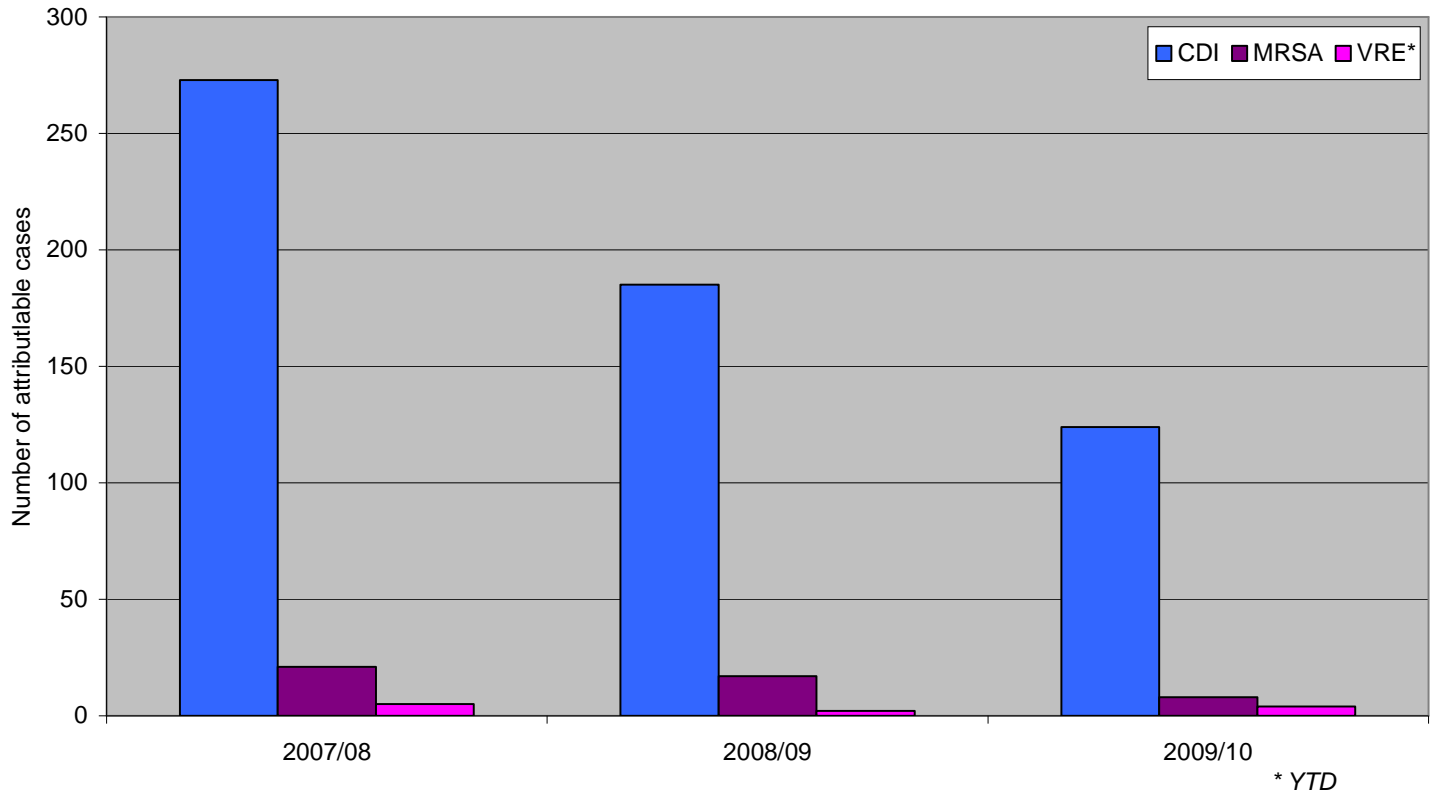


**Chart Showing Sub-Groups of Infection Control Committee**

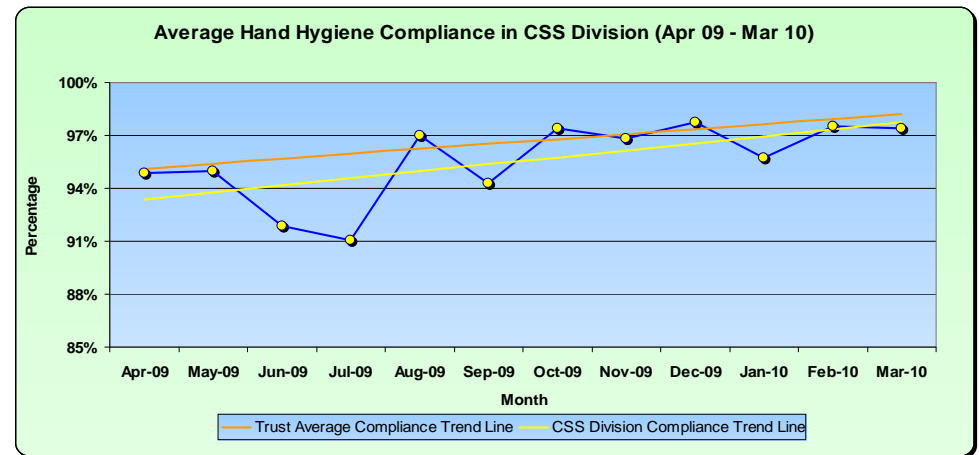
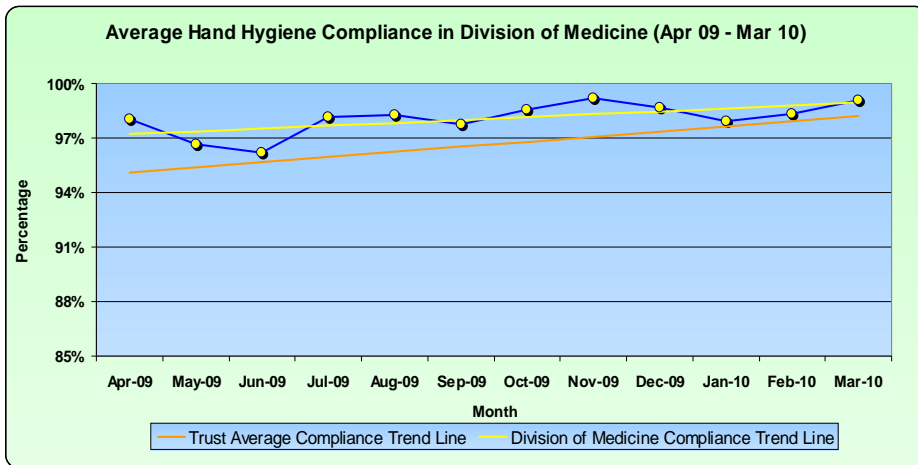
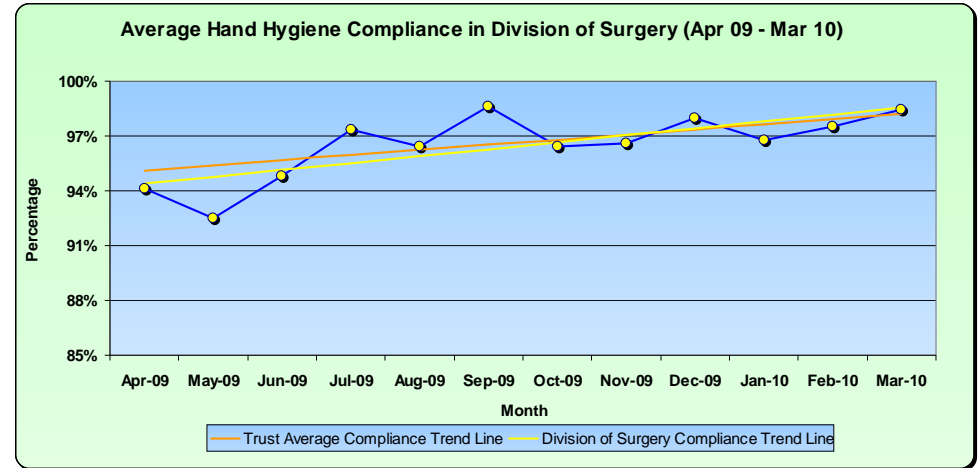
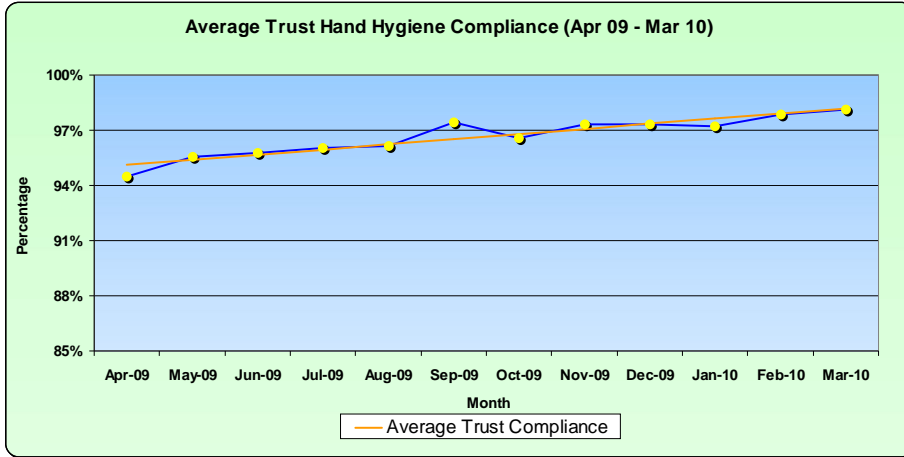


## APPENDIX 2 - HCAI Yearly Comparisons

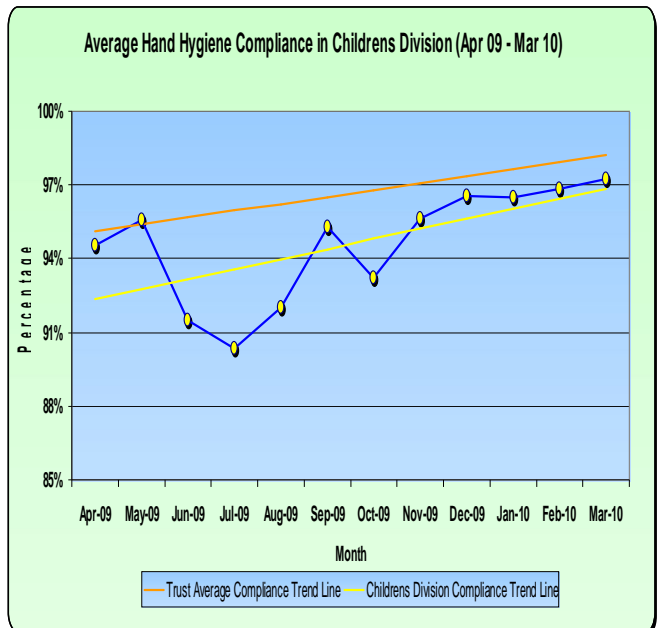
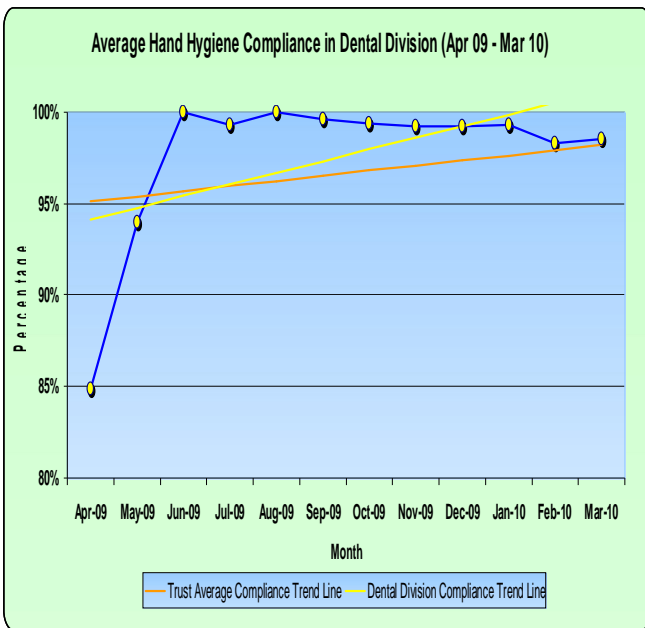
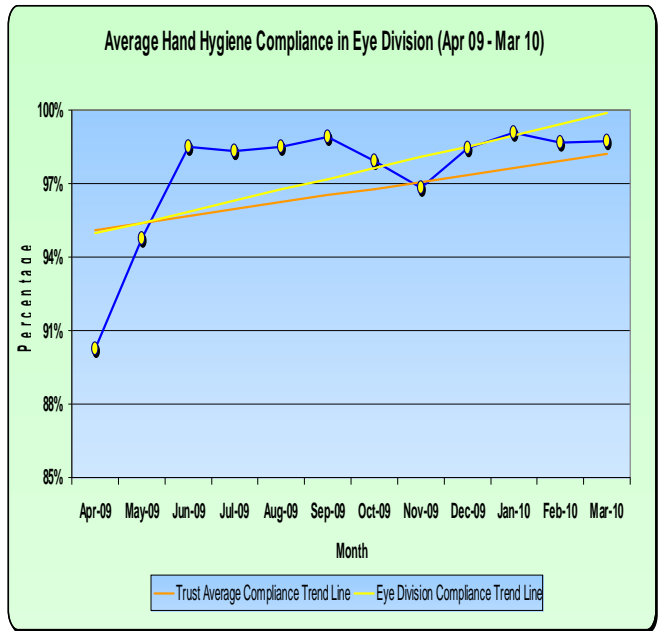
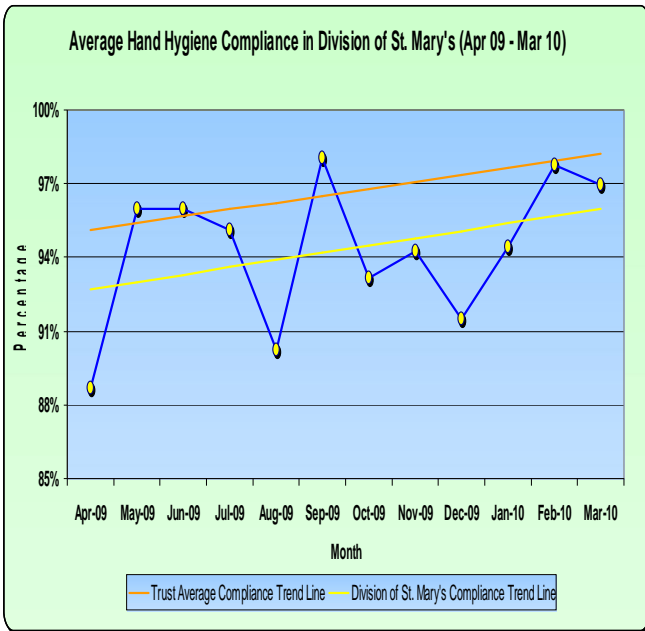
MRSA bacteraemia, VRE bacteraemia and *C. difficile* infections - yearly comparisons



**APPENDIX 3 – Audit**  
**Figure 1: Audit of Hand Hygiene Practice**



# APPENDIX 3 – Audit



## APPENDIX 3 – Audit

Figure 2: Audit of ANTT Trends in Division of Medicine

ANTT TRENDS- Medicine	Apr 09	May 09	Jun 09	Jul 09	Aug 09	Sep 09	Oct 09	Nov 09	Jan 10	Feb 10	Mar 10
No. of forms	74	75	78	77	68	70	75	59	60	76	Pending
<b>Standard</b>											
Hands decontaminated	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Explain rationale for hand decontamination	100%	100%	100%	99%	100%	100%	100%	100%	100%	100%	99%
Appropriate aseptic field selected	100%	100%	100%	99%	100%	100%	100%	100%	100%	100%	99%
Aspetic field cleaned correctly	99%	100%	100%	100%	99%	100%	100%	100%	100%	100%	99%
All equipment gathered correctly	99%	100%	99%	99%	100%	100%	100%	100%	100%	100%	100%
PPE worn	99%	99%	98%	99%	99%	100%	100%	100%	100%	100%	96%
Individual able to articulate	100%	100%	99%	99%	100%	100%	100%	98%	100%	100%	99%
Individual protects key parts in preparation phase	98%	100%	99%	100%	100%	100%	100%	98%	100%	100%	99%
Patient identification confirmed	98%	100%	97%	100%	100%	100%	100%	100%	98%	100%	100%
Key parts protected /prepared during procedure	98%	100%	100%	100%	99%	100%	100%	100%	100%	100%	100%
If key parts contaminated did individual stop procedure	86%	NA	100%	71%	67%	60%	22%	20%	100%	92%	
Hands decontaminated at end of procedure	98%	99%	95%	99%	100%	100%	100%	100%	100%	100%	97%
Hands decontaminated at all times during procedure	100%	99%	100%	97%	99%	100%	100%	100%	100%	100%	100%
Appropriate documentation completed	100%	100%	100%	94%	99%	100%	100%	100%	100%	100%	99%
Disposal of all waste undertaken in accordance with policy	99%	100%	100%	97%	99%	100%	100%	100%	100%	100%	100%

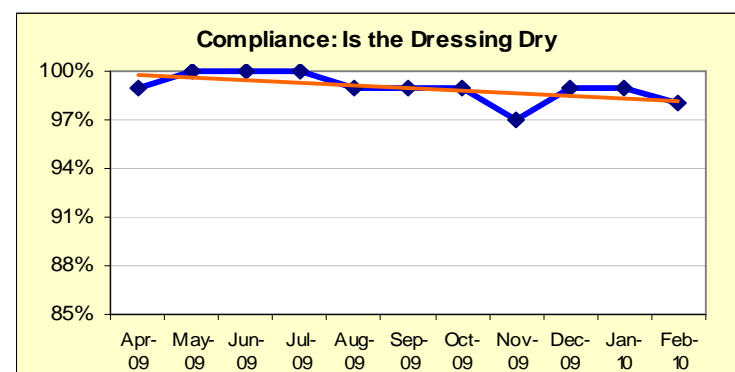
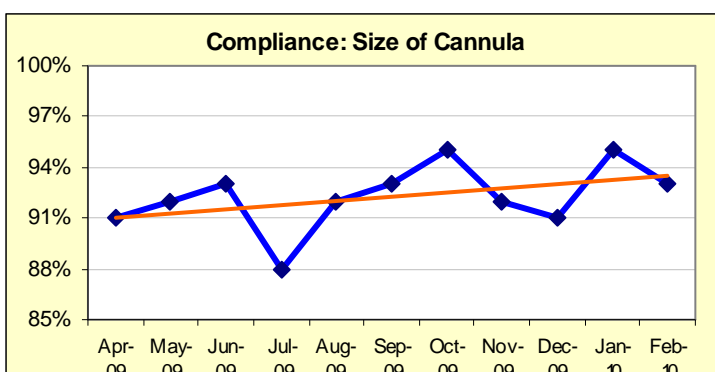
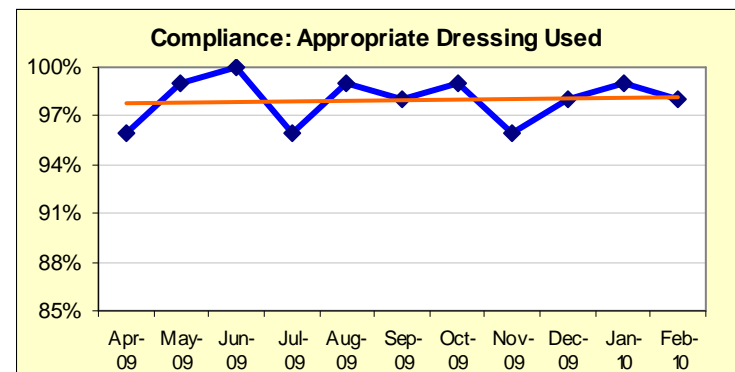
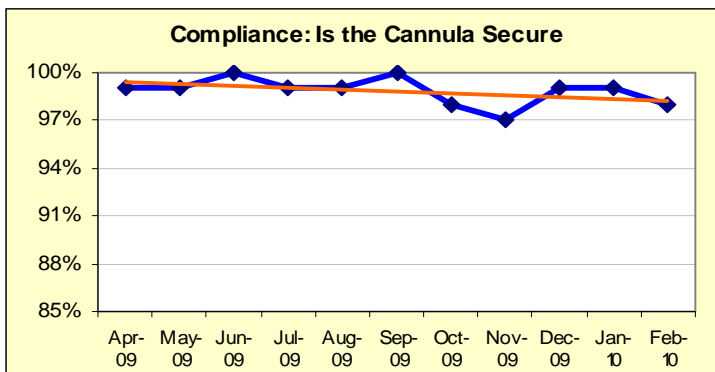
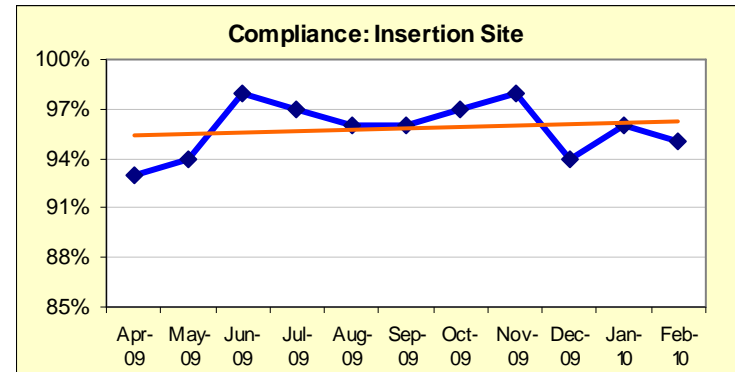
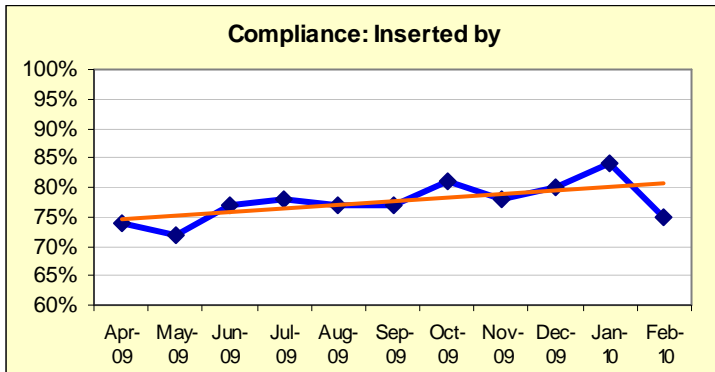
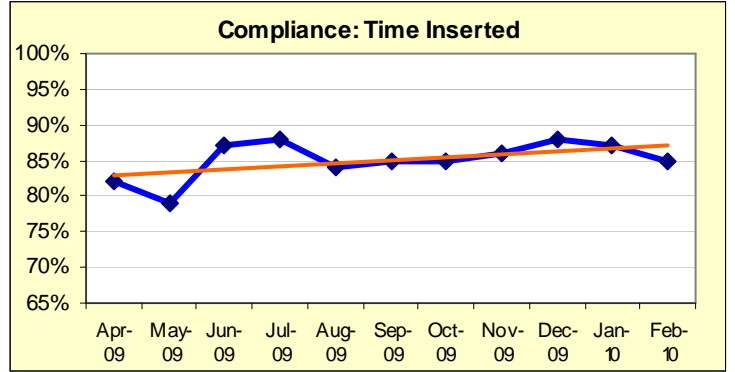
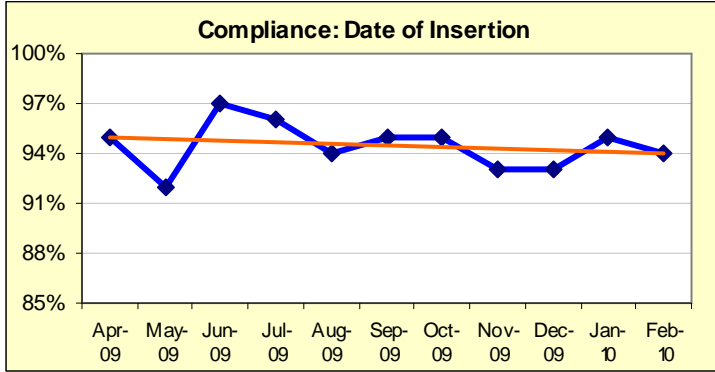
### KEY

	95-100%
	90-94%
	<89%

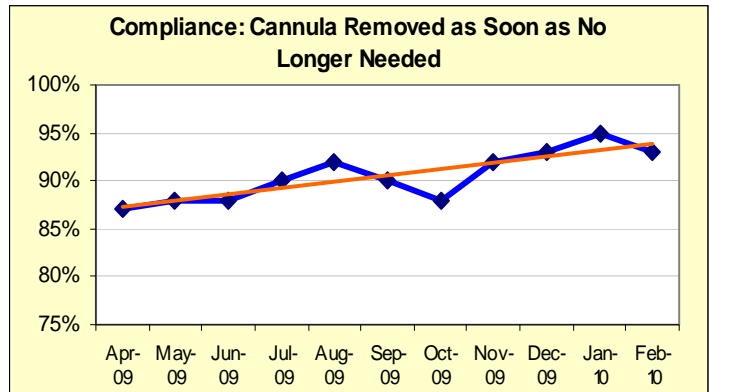
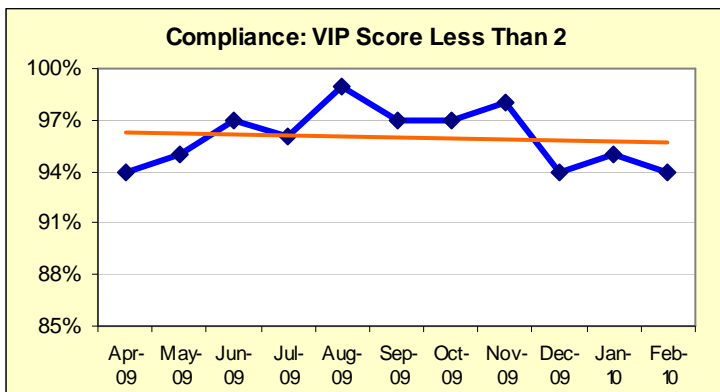
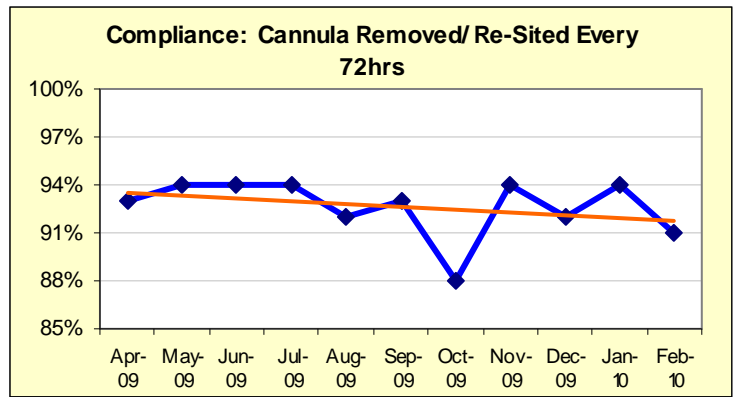
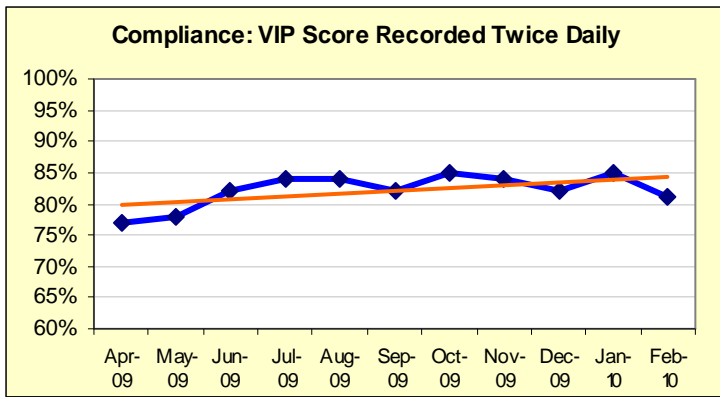
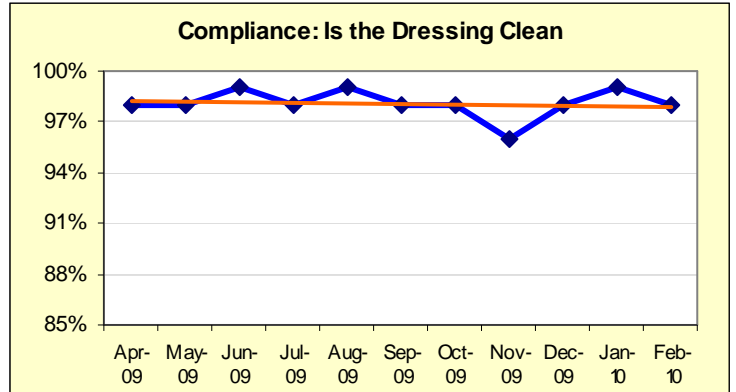
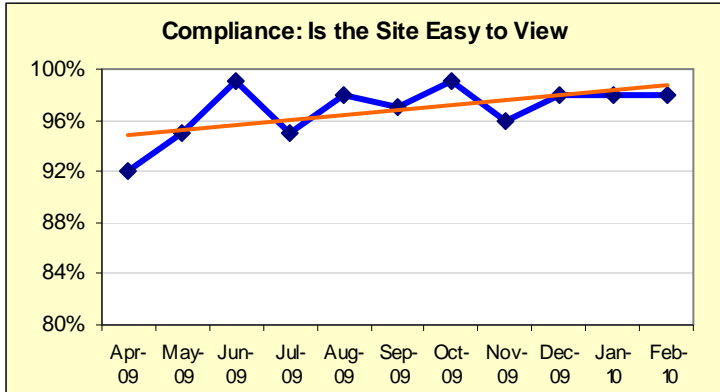
**APPENDIX 3 – Audit**

**Figure 3: Trends for the Criteria Relating to VIP (Peripheral Cannulae) for the Division of Medicine**

Key: ◆ Compliance — Trendline - Medicine



**APPENDIX 3 - Audit**



### APPENDIX 3 - Audit

Figure 4: Audit of ANTT Trends in Division of Surgery

ANTT TRENDS- Surgery	Apr 09	May 09	Jun 09	Jul 09	Aug 09	Sep 09	Oct 09	Nov 09	Jan 10	Feb 10	Mar 10
No. of forms	21	27	26	26	26	26	28	21	19	20	<i>Pending</i>
<b>Standard</b>											
Hands decontaminated	100%	100%	100%	100%	96%	100%	96%	100%	100%	100%	
Explain rationale for hand decontamination	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Appropriate aseptic field selected	100%	100%	100%	100%	100%	100%	96%	100%	100%	100%	
Aseptic field cleaned correctly	100%	100%	100%	100%	100%	100%	96%	100%	100%	100%	
All equipment gathered correctly	100%	100%	100%	100%	100%	100%	96%	95%	100%	100%	
PPE worn	100%	100%	100%	100%	100%	100%	96%	100%	100%	100%	
Individual able to articulate	100%	96%	100%	100%	100%	100%	96%	100%	100%	100%	
Individual protects key parts in preparation phase	100%	100%	100%	100%	100%	100%	96%	100%	100%	100%	
Patient identification confirmed	96%	100%	100%	96%	100%	100%	100%	100%	100%	100%	
Key parts protected /prepared during procedure	96%	100%	100%	100%	100%	100%	93%	100%	100%	100%	
If key parts contaminated did individual stop procedure	100%	NA	NA	0%	NA	75%	50%	100%	100%	0%	
Hands decontaminated at end of procedure	96%	100%	100%	96%	96%	100%	100%	100%	100%	100%	
Hands decontaminated at all times during procedure	100%	100%	100%	92%	100%	100%	96%	100%	100%	100%	
Appropriate documentation completed	100%	100%	100%	96%	100%	100%	96%	100%	100%	100%	
Disposal of all waste undertaken in accordance with policy	100%	100%	100%	96%	100%	100%	96%	100%	100%	100%	

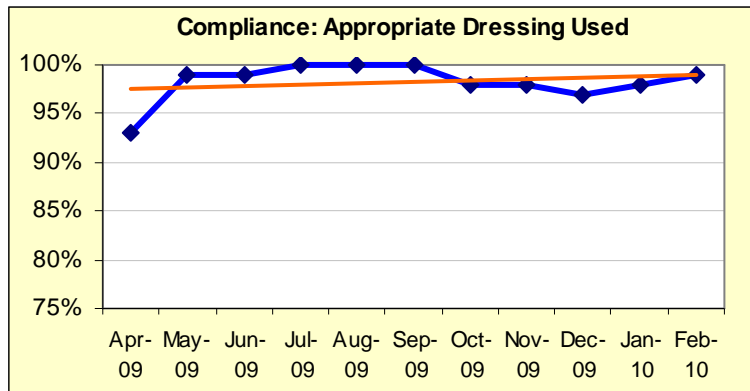
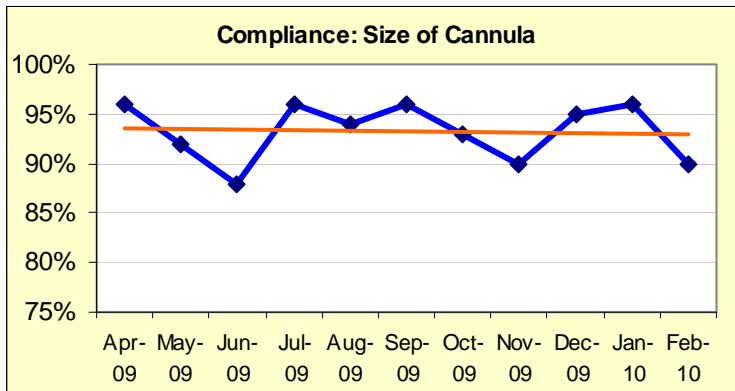
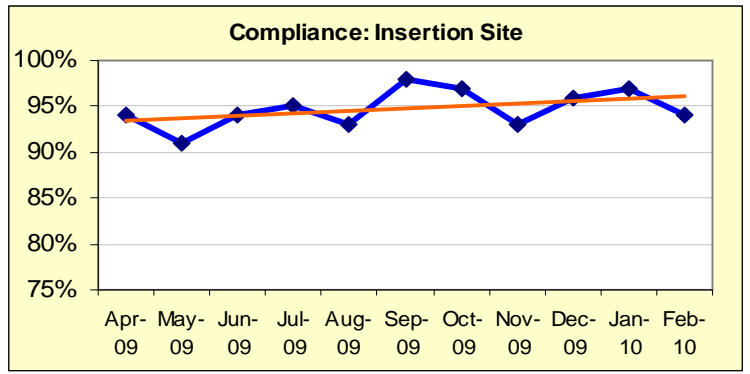
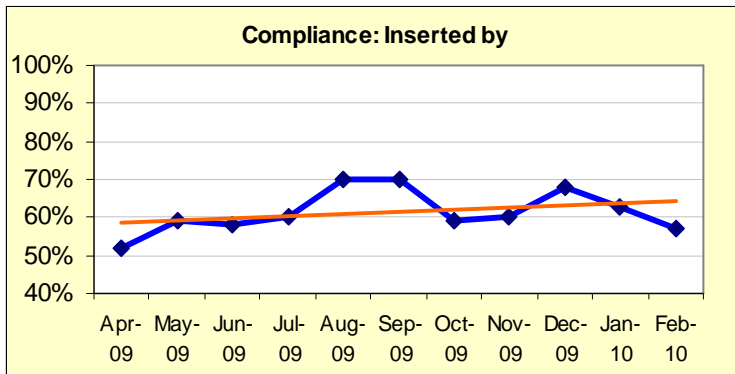
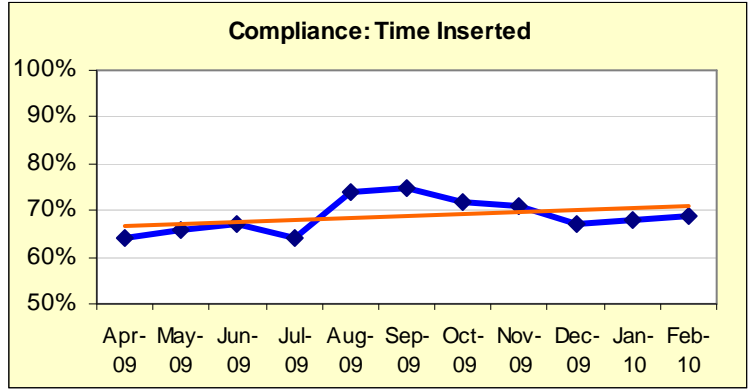
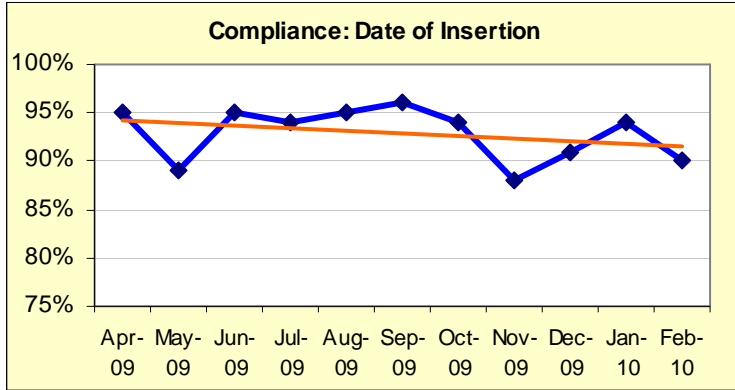
#### KEY

	95-100%
	90-94%
	<89%

**APPENDIX 3 – Audit**

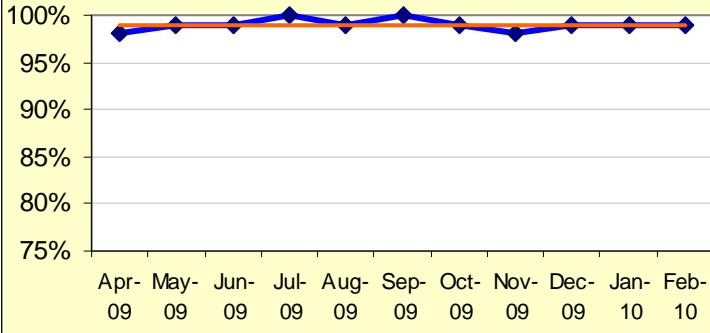
Figure 5: Trends for the Criteria Relating to VIP (Peripheral Cannulae) for the Division of Surgery

Key: ◆ Compliance — Compliance Trendline - Surgery

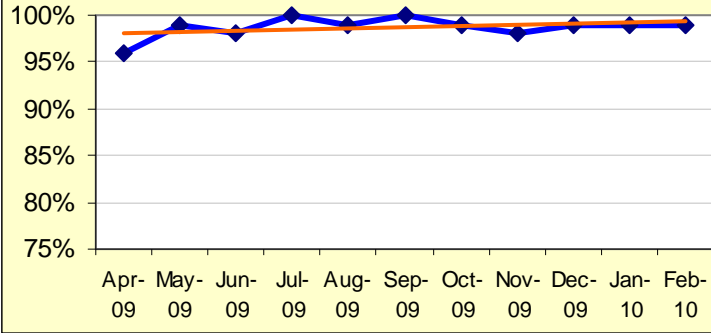


**APPENDIX 3 - Audit**

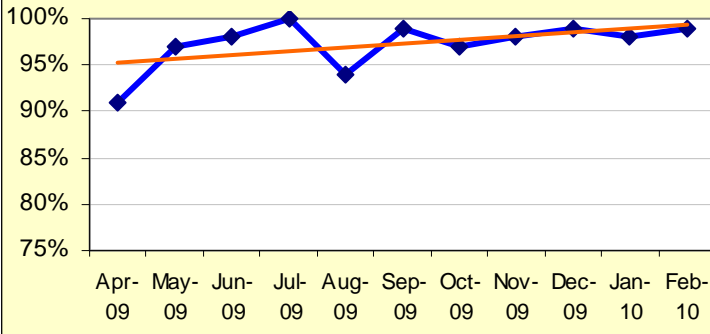
**Compliance: Is the Cannula Secure**



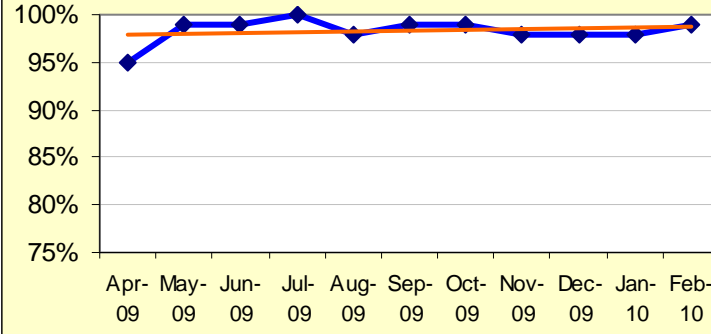
**Compliance: Is the Dressing Dry**



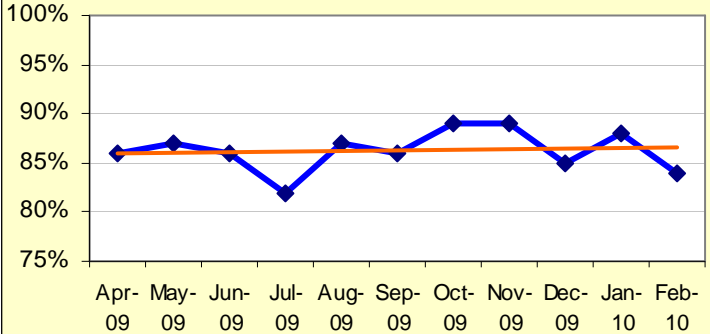
**Compliance: Is the Site Easy to View**



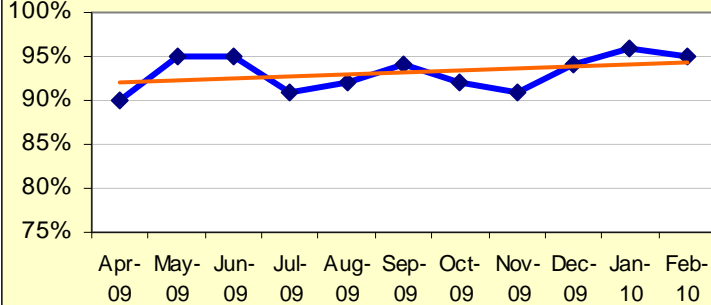
**Compliance: Is the Dressing Clean**



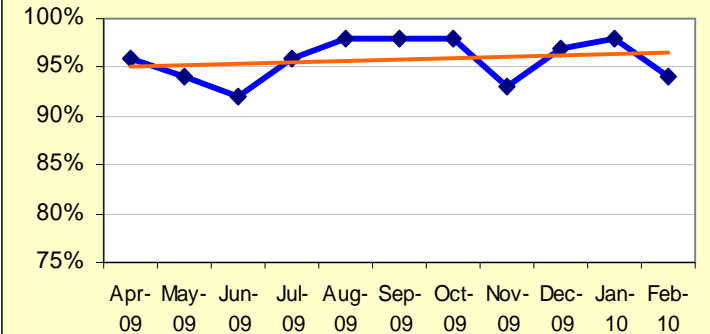
**Compliance: VIP Score Recorded Twice Daily**



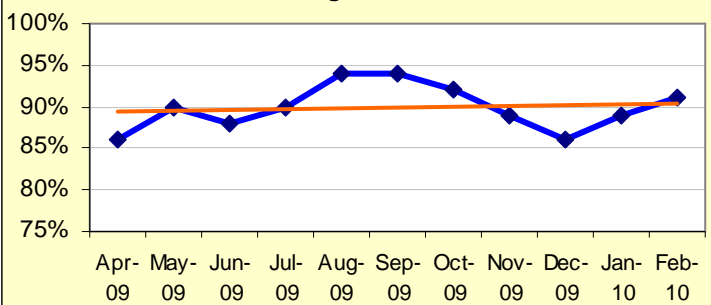
**Compliance: Cannula Removed/ Re-Sited Every 72hrs**



**Compliance: VIP Score Less Than 2**



**Compliance: Cannula Removed as Soon as No Longer Needed**



## APPENDIX 4 – Care Quality Commission Action Plan

Issues identified	Action	Measure of action implemented	Lead	Comment
<p><b>Environmental Cleaning,</b></p> <p>High Level Dusting - dusty curtain tracks</p> <ul style="list-style-type: none"> <li>Toilets dirty</li> <li>Bedside tables and lockers dirty</li> <li>Floor dust debris and litter</li> <li>Cleaning trolleys dirty</li> </ul>	<ul style="list-style-type: none"> <li>Letter to Sodexo managers and supervisors regarding responsibilities for monitoring and performance management</li> <li>Joint monitoring to include ward staff. Annual programme agreed</li> </ul>	<p><b>Sodexo site Director 09/02/10</b></p> <ul style="list-style-type: none"> <li>Letter sent out to all managers and supervisors.</li> <li>All communication has been signed for and will be retained for performance management of individuals</li> <li>Ward Staff to be invited to attend joint monitoring sessions as of <b>1<sup>st</sup> March 2010.</b></li> </ul>	<p>Site Director, Sodexo Healthcare/ Ass Dir Facilities</p> <p>Site Director, Sodexo Healthcare/ Ass Dir Facilities</p>	<p>Action completed 01.03.10</p> <p>Completed 31.03.10</p>
<ul style="list-style-type: none"> <li>Ventilation Grilles/ceiling tiles</li> </ul>	<ul style="list-style-type: none"> <li>Review current standard for frequencies for decontamination of ventilation grilles and ceiling tiles.</li> </ul>	<ul style="list-style-type: none"> <li>Audit of ventilation grills and ceiling tiles. Review of PPM activity and TVE as required</li> <li><b>Update from Assistant Director of Estates 16/02/10:</b> <ul style="list-style-type: none"> <li>A full survey undertaken, of all showers and ventilation grill on all ward areas. A list of areas needing attention issued to Sodexo and relevant reference numbers recorded.</li> <li>Review carried out and remedial works in place</li> </ul> </li> </ul>	<p>Ass Dir Estates CMFT/ Estates Sodexo HC</p>	<p>Complete 31/03/10</p> <p>Cleaning regime for Vent grilles increased to twice a year.</p>

<ul style="list-style-type: none"> <li>Shower rooms (bad drainage smell)</li> </ul>	<ul style="list-style-type: none"> <li>Review of drainage of shower rooms on wards 30,31 &amp; 32</li> </ul>	<p><b>Update from Assistant Director Estates 04/03/10:</b></p> <ul style="list-style-type: none"> <li>addressing the shower issues with Project Co and will relay the information when issued.</li> <li>Cause identified as a design fault escalated via Project Co to Bovis</li> </ul>	Ass Dir Estates CMFT/ Estates Sodexo HC	Escalated via Project Co to BOVIS
<ul style="list-style-type: none"> <li>Storage issues</li> </ul>	<ul style="list-style-type: none"> <li>Matrons and ward managers to review storage</li> </ul>	<p><b>Update from Lead Nurse Meeting 11/02/10</b></p> <ul style="list-style-type: none"> <li>Each ward will review storage issues and submit a requisition.</li> </ul>	Ward Managers	
<p><b>Patient shared Equipment, for example</b></p> <ul style="list-style-type: none"> <li>Cleaning of commodes</li> <li>B/P machines dusty</li> </ul>	<ul style="list-style-type: none"> <li>Explicit responsibilities to be included in cleaning policy</li> <li>Visual materials indicating appropriate cleaning for pt shared equipment to be in place by March 2010</li> </ul>	<ul style="list-style-type: none"> <li>Policy revised and to be ratified at Infection Control Committee. Launch March 2010</li> <li>Visual materials in place on all wards and departments</li> </ul>	Ass Dir of Facilities/Nurse Cons IP&C  Nurse Cons IP&C	Ratified at Trust ICC 10/03/10  Distributed to lead nurses/ward managers 02/03/10
<ul style="list-style-type: none"> <li>Resuscitation equipment</li> </ul>	<ul style="list-style-type: none"> <li>Review current policy for checking resuscitation trolleys and re-stocking of trolleys post arrest</li> </ul>	<ul style="list-style-type: none"> <li>Review to be completed March 2010 and Audited June 2010</li> </ul> <p>Update from Resuscitation Manager 09/02/10</p>	Resuscitation Officer/Med Dev Co-ordinator	Completed 01/03/10
<p><b>Beds and Mattresses</b></p> <ul style="list-style-type: none"> <li>Testing of mattresses</li> </ul>	<ul style="list-style-type: none"> <li>Audit of all mattresses in the Trust</li> </ul>	<ul style="list-style-type: none"> <li>Audit of all mattresses by Hill ROM (27th and 28<sup>th</sup> Feb 2010 (central site) and recurring twice yearly).</li> </ul>	ADNS	Audit completed on Central island 06/03/10

<ul style="list-style-type: none"> <li>Decontamination of mattresses and bed frames</li> </ul>	<ul style="list-style-type: none"> <li>Policy for Bed cleaning/storage/maintenance : mattress cleaning/checking/storage and replacement/audit proforma for mattresses</li> </ul>	<p><b>Update from ADNS 02/03/10</b></p> <ul style="list-style-type: none"> <li>Policy to be launched March 2010. Monthly check of all mattresses to be in place by end March 2010 – audit that process is occurring September 2010</li> <li>Sodexo will have a system in place to identify when bed frames need weekly cleaning</li> </ul>	<p>TVN/Nurse Cons IP&amp;C</p> <p>Sodexo Site Director/Trust Monitoring Team</p>	<p>Ratified at Trust ICC 10/03/10</p> <p>Pilot scheme to be undertaken in Div of Med May 2010</p>
<p><b>Use of cleaning Materials</b></p> <ul style="list-style-type: none"> <li>Appropriate use of cleaning materials: Chlor-clean and Haz tabs</li> </ul>	<ul style="list-style-type: none"> <li>Training package for use of disinfectants for Domestic and Nursing staff to be cascaded by ICT from March 2010 – June 2010.</li> <li>'E' Learning package</li> <li>(completed by June 2010) for decontamination of pt shared equipment - to be completed by all nursing</li> </ul>	<p><b>Update from Nurse Consultant 12/02/10</b></p> <ul style="list-style-type: none"> <li>Training package prepared. To be presented at next LN meeting and March Ward managers meeting</li> <li>In liaison with Sodexo regarding dissemination to domestic staff</li> <li>Package available and accessible to complete by August 2010</li> <li>Test knowledge KSF reviews (decontamination under H&amp;S)</li> </ul>	<p>Nurse Cons IP&amp;C</p> <p>Nurse Consultant IP&amp;C</p>	<p>Roll out to commence in A&amp;E/Med Div 18/03/10 /Div of Surgery 01/03/10</p> <p><b>To be included in IC Annual Plan for 10/11 Julie Cawthorne</b></p>

	staff and AHP's as appropriate			
<b>Waste Management</b> <ul style="list-style-type: none"> <li>• Waste rooms unlocked</li> <li>• Compound unlocked</li> <li>• Bins unlocked</li> </ul>	<ul style="list-style-type: none"> <li>• Signage on waste room doors</li> <li>• Note to staff re rooms being locked</li> </ul>	<ul style="list-style-type: none"> <li>• Appropriate signage in place March 2010</li> <li>• Article in Team Brief Feb 2010</li> <li>•</li> </ul>	Site Director Sodexo HC	provision of encapsulated signs to be completed by 19 <sup>th</sup> Feb 2010.

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# Infection Prevention & Control Annual Plan

**April 2010 – March 2011**

<b>Policies</b>				
<b>Action</b>	<b>Location</b>	<b>Outcome Measure</b>	<b>Lead</b>	<b>Date of Completion</b>
Rolling programme of update of Infection Prevention & Control (IP&C) policies in Policy Manual	Trust-wide	Policies will be ratified by the Infection Control Committee (ICC) and updated in IP&C Manual	Jo Rothwell	March 2011
All emergency admissions (outwith current policy) will be screened on admission for MRSA	Trust-wide	Completion of implementation of Action Plan across Divisions  Audit of screens	Julie Cawthorne	November 2010  March 2011
Roll out of reviewed <i>Clostridium difficile</i> Infection (CDI) Policy that will include identification and management of Periods of Increased Incidence (PII's)	Division of Medicine Division of Surgery Trust-wide	PII's will be reported at weekly KPI meeting	Jo Rothwell	July 2010
Preparation for NHSLA Level 3 - Hand Hygiene - Infection Control	Trust-wide	Progress reports to ICC and Operational Risk Management Group	Julie Cawthorne	March 2010
Participation in Trust Quality Campaign - Reduction in Incidence of CDI - Reduction in incidence of Surgical Site Infection (SSI)	Division of Medicine	Progress report to ICC and Quality Forum	Julie Cawthorne	March 2010

<b>Surveillance</b>				
<b>Action</b>	<b>Location</b>	<b>Outcome Measure</b>	<b>Lead</b>	<b>Date of Completion</b>
Surveillance of nosocomial MSSA	Division of Medicine	Quarterly report to ICC and Division of Medicine IC Meeting	Andy Dodgson Alistair Hutchison	July 2010
Implementation of Matching Michigan Project	Critical Care Units (ICU/HDU) PICU/PHDU NICU	Quarterly report to ICC and Division of Medicine IC Meeting	Jo Rothwell Andy Dodgson	September 2010
Surveillance of Ventilator Associated Pneumonia	ICU	Quarterly report to ICC and CSS Clinical Governance Meeting	Andy Dodgson Jane Eddleston	November 2010
Prevalence Survey of SSI	Trust-wide	Report and Action Plan to ICC	Julie Cawthorne	November 2010
Post-discharge Surveillance of SSI	Cardio-thoracic Directorate	Report to ICC and Division of Medicine IC Meeting	Julie Cawthorne Ann Woodward	November 2010
	Orthopaedic Directorate	Report to ICC and Division of Surgery IC Meeting	Julie Cawthorne Sally Webster	TBC with PCT

<b>Training</b>				
<b>Action</b>	<b>Location</b>	<b>Outcome Measure</b>	<b>Lead</b>	<b>Date of Completion</b>
Development of an e-learning programme for cleaning and decontamination of patient-shared equipment	Trust-wide For all staff with responsibility for cleaning and decontamination of patient-shared equipment	Module will be live by August 2010  Will be included in Divisional performance figures for mandatory training	Janice Streets	September 2010
Development of an e-learning package for Consultants	Trust-wide	Module will be live by August 2010  Will be included in Divisional performance figures for mandatory training	Julie Cawthorne	September 2010
IP&C Annual Conference for CMFT staff	Trust-wide	Evaluation of Study Day reported to the ICC Expert Group	Jo Rothwell	November 2010

## 1. Audit of Clinical Practice and Procedures

Action	Location	Outcome Measure	Lead	Date of Completion
Monitoring compliance with Clinical Policies/Protocols - Hand Hygiene - Aseptic non-touch technique (ANTT) - Visual Inspection Phlebitis (VIP) - Personal Protective Equipment (PPE)	Trust-wide	Hand Hygiene Monthly Report to Director of Infection Prevention & Control (DIPC) and to Divisions	Jo Rothwell	September 2010
		ANTT/VIP Quarterly Reports to DIPC and to Divisions <ul style="list-style-type: none"> <li>• Divisions of Medicine/Surgery/Children's from Quarter 1</li> <li>• Divisions of CSS/SMH/REH/Dental from Quarter 2</li> </ul>	Jo Rothwell	
Cleaning of patient-shared equipment	Trust-wide	To be reviewed in Matron's ward round	Julie Cawthorne	November 2010

## 2. Audit of IP&C Policies

Audit of MRSA ICP (April 2010)	Trust-wide	Report to ICC and Divisions	Janice Streets	July 2010
Audit of CDI ICP (October 2010)	Trust-wide	Report to ICC and Divisions	Michelle Worsley	November 2010
Audit of Disposal of Sharps (September 2010)	Trust-wide	Report to ICC and Divisions	Melanie Phillips	November 2010
Audit of Antibiotic Prescribing (December 2010)	Trust-wide	Report to ICC and Divisions	Kelly Alexander	January 2011
Audit of CJD Guidelines (Questionnaire)	RMCH MREH	Report to ICC and Divisions	Jo Rothwell	November 2010