Surrey and Sussex NHS
Healthcare NHS Trust

Trust Board – Public
29 September 2011

Agenda item: 3.4

Infection Prevention-Control & Antibiotic Stewardship (IPCAS) Annual Report 2010-11

For: Information

Summary: Surrey & Sussex (SASH) NHS Trust has undergone a significant change in management structure in the last year with new appointments of Chief Executive and Chief Medical Officer (formerly named Medical Director). The post of Director of Infection Prevention and Control (DIPC) was passed from Consultant Microbiologist to the Chief Nurse and currently sits with the Chief Medical Officer. Throughout this period, the IPCAS Team and Group have met regularly to implement and oversee IPCAS strategy for the Trust.

The CQC revisited SaSH in April 2010 as part of the follow up subsequent to their unannounced visit relating to the Hygiene Code in January 2010. Assurance was provided that the Trust had taken the immediate action as outlined in the requirements of the initial visit and the CQC has subsequently announced that the Trust is now compliant with the Hygiene Code.

Key Performance Indicators

MRSA BSI

In 2010/11 the Trust reported 14 MRSA bloodstream infections (BSI). Of the 14 cases, 4 were apportioned to the acute Trust. This met the annual national target of 5, and was lower than the number of Trust apportioned cases reported in 2009/10 (8 of 17 cases)

This has continued the downward trend in Trust apportioned cases since 2002/03. Sustained focus on hand hygiene, care of intravenous cannulae, urethral catheters and surgical wounds, better blood culture taking techniques, improvements in tissue viability care (e.g. prevention and management of pressure ulcers) and adherence to admission MRSA screening protocols have continued to contribute to this reduction. The challenge ahead is to maintain this focus in order to further reduce risk in these areas. For 2011/12 there are to be no unavoidable Trust apportioned MRSA BSIs.

Clostridium difficile infection (CDI)

In 2010/11 the Trust reported 70 Trust apportioned CDIs,

which met both the national and local SHA stretch targets (136 and 80 respectively). This is a continuation of the downward trend from previous years.

Continued focus on improvements in antibiotic prescribing, environmental cleanliness and hand hygiene have contributed to this risk reduction. In addition, rigorous application of "period of increased incidence" (PII) control measures has consistently prevented escalation of small clusters of cases into significant outbreaks.

MRSA screening

MRSA admission/pre-admission screening for all patients undergoing elective surgical and investigative procedures was introduced in April 2009. The Trust achieved 100% compliance consistently for each quarter of 2010/11. Screening for all emergency admissions has subsequently been implemented in accordance with DH requirements, with 100% compliance being achieved in the last quarter of 2010/11.

Orthopaedic surgical site infection (SSI) surveillance

Infection rates for hip implant surgery for the first quarter of 2010-11 were above the national average. Inconsistency in data collection was deemed to be a significant contributory factor. The Trauma & Orthopaedic Department has devised an action plan to address this, which has been monitored at IPCAS Group level. Data collection for the last quarter of 2010-11 has been undertaken jointly by members of the T&O department and IPCAS Team. The results are not yet available at this time.

Outbreaks

The IPCAS team led on management of several outbreak episodes:

- *Clostridium difficile* (3 clusters)
- Norovirus (2 waves of outbreak)
- PVL-MRSA (single outbreak)

There was variable impact on patient outcomes but all outbreak episodes had significant impact on patient experience and service delivery. Details of these outbreaks can be found within the body of this report.

MSSA BSI

As of 1st January 2011, all Trusts were required to report cases of MSSA BSI. Cases are apportioned as for MRSA BSIs. The

data collected will be used to identify areas of risk and, it is envisioned, to set objectives.

Influenza

During the months of December 2010 to January 2011 there were approximately 300 laboratory test requests for influenza testing at SASH. There were 65 laboratory confirmed cases of influenza, 38 of which were Influenza A/H1N1 (2009) 'swine flu' strain. The number of admissions with suspected influenza required the use of a dedicated cohort bay on Tilgate ward during this period.

Antibiotic Stewardship

There have been no major changes in the composition of the antibiotic stewardship team in the past year. The Trust antimicrobial Pharmacist continues to undertake both antibiotic pharmacy and general pharmacy roles, and this significantly limits the time available for antimicrobial pharmacy activity.

The SHA assessment (using the ASAT tool) of the trust antibiotic stewardship programme showed considerable improvement since the previous assessment in 2009-10. There has been regular audit activity on prescribing, surveillance of '*C.difficile* associated antimicrobials' and of consumption of restricted antimicrobials. Results have been fed back to directorates on a quarterly basis. There have been innovative and active education and training sessions which have been rolled out on a trust-wide basis. The effectiveness of the programme is reflected in a slow but upward trend of improvement with compliance with policy.

On-going challenges

The challenges facing the Trust as it endeavours to maintain high standards of cleanliness, infection prevention and control, and antibiotic stewardship, come from the pressures brought about by continually rising emergency attendances, capacity and patient flow inefficiencies, and resource constraints.

In combination, these pressures result in:

- Diversion of staff resource and operational focus towards managing admission and discharge targets, and away from providing IPCAS controls assurance

- Ineffective and inappropriate use of clinical areas for accommodation of patients, including sub-optimal use of limited available single room isolation

- Insufficient financial support for optimal decontamination

	(including cleaning) of clinical areas and equipment Plans for 2011/12 to help to address these challenges are incorporated into: ▪ Ongoing business case for improvements to acute admissions inpatient flow and capacity which encompasses plans for improvements in single room availability.

Action:	The Board is asked to accept

Presented by:	Ashley Flores, Deputy Director Infection Prevention and Control.
Author:	Dr Karen Knox, Ashley Flores, Ruth Bradburn Amy Lee, Colin Pink, Dr Donald Lyon

Notes:

Trust objective:	Please list number and statement this paper relates to. 1. Reduce Avoidable Harm
Legal:	What are the legal considerations and implications linked to this item? Please name relevant act Health and Social Care Act (2008)

Regulation:	What aspect of regulation applies and what are the outcome implications? This applies to <u>any</u> regulatory body – key regulators include: Care Quality Commission, MHRA, NPSA & Audit Commission Code of practice for Infection Prevention and Control. Key regulator: Care Quality Commission

Reviewed & Approved by Management Board for Quality & Risk **Date: 17th August 2011**

Reviewed & Approved by the relevant Board Committee **Date:**

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Infection Prevention-Control & Antibiotic Stewardship (IPCAS)
Annual Report for 2010/11

Executive Summary

Surrey & Sussex (SASH) NHS Trust has undergone a significant change in management structure in the last year with new appointments of Chief Executive and Chief Medical Officer (formerly named Medical Director). The post of Director of Infection Prevention and Control (DIPC) was passed from Consultant Microbiologist to the Chief Nurse and currently sits with the Chief Medical Officer. Throughout this period, the IPCAS Team and Group have met regularly to implement and oversee IPCAS strategy for the Trust.

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- Insufficient financial support for optimal decontamination (including cleaning) of clinical areas and equipment

Plans for 2011/12 to help to address these challenges are incorporated into:

- Ongoing business case for improvements to acute admissions inpatient flow and capacity which encompasses plans for improvements in single room availability

Section A

IPCAS ANNUAL REPORT FOR 2010/11

1) Overview

1.1) Introduction

This Annual Report and Programme has been prepared for and is submitted to the Trust Board by the IPCAS Team on behalf of the Trust's IPCAS Group (formerly Infection Control Committee). It summarises the "state of play" in terms of achievements, developments, performance and standards by the Trust and its staff in key areas and against key objectives relating to infection prevention and control and prudent antibiotic prescribing.

In delivering this report and in setting the Annual Programme for the forthcoming year, the members of the IPCAS Team look forward to continuing to work with the executive, operational, clinical and support teams of the Trust in improving practices in infection prevention and control and antibiotic prescribing for the benefit of our patients. It is clear that there is a better appreciation of the vital importance of high standards in these aspects of clinical care and that, through training and education, surveillance and reporting, policy and audit, and clinical liaison and support, the IPCAS Team can continue to encourage improvements in practice.

The Team also continues to emphasise the fundamental requirement that individual departments must continue to embed, through the guidance and leadership of their designated senior clinical leads, the principles and practices of IPCAS into the daily activity of every member of staff.

1.2) National picture

The Operating Framework for the NHS in England for 2010/11 has maintained the focus on reducing healthcare-associated infections (HCAIs) as a central component to improving patient safety and patient experience, and to meeting overall quality objectives.

1.2.1) MRSA bloodstream infections (BSI)

This is the first year of data to be published since the implementation of separate MRSA objectives for Trust vs. Community apportioned cases. Cases are apportioned on the basis of the time of detection of the BSI. Those that are detected 3 or more calendar days after the date of admission (admission date being considered day "1") are Trust apportioned. Acute Trust MRSA BSI rates

are measured by number per 100,000 bed-days. Organisations with rates worse than the median are required to reduce them to the median or by 20% whichever is the greater. Those with rates better than the median are required to reduce them to the best performing quartile or by 20% whichever is the less. Organisations within the best–performing quartile are required to set targets locally with the aim of at least maintaining their performance and striving for further reductions where possible.

Baseline rates required to inform targets for 2010/11 were calculated from data submitted by all Acute Trusts during the period October 2008 to September 2009. Each Acute Trust's position in relation to the median and best-performing quartile will be re-calculated each year in order to inform on-going annual targets on the basis of performance during each preceding year.

Nationally, the final figures for MRSA BSI for 2010/11 are not yet published. However, data to December 2010 are available. A summary figure of MRSA BSI total numbers and overall rates from October 2008 to December 2010 for all NHS hospital Trusts is given below (Figure 1).

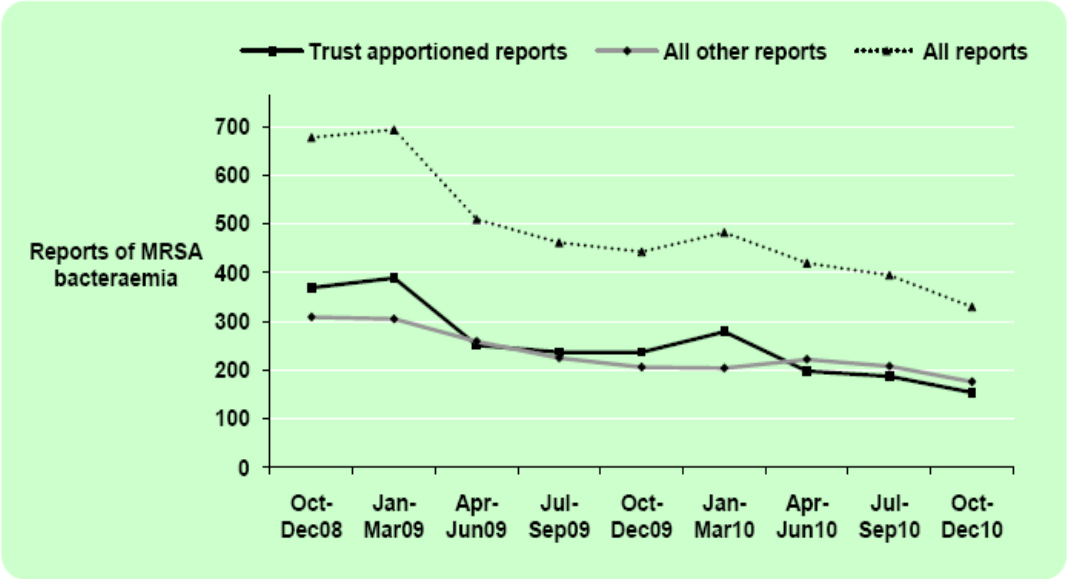
In terms of actual numbers, there has been a 51.3% decrease in the overall numbers of MRSA BSI reports in England, from 678 in October-December 2008 to 330 in October-December 2010. In comparison with the previous quarter (July-September 2010) there has been a 16.5% decrease (from 395). Mandatory reporting of MRSA BSI began in April 2001; it is interesting to note that a decline in numbers was already evident before the 3-year reduction programme began – the peak being 7,700 cases in 2003/04.

In terms of rate of MRSA BSI, this was essentially stable in the years running up to and including the first year (2005/06) of the reduction programme. The mean rate of 2001/02 to 2004/05 was 1.77 cases per 10,000 bed days, and the rate for 2005/06 was 1.78. From that point, the rate has fallen consistently.

Numbers of Trust apportioned MRSA BSI reports for the period October – December 2010 have shown a 58.3% decrease (from 369 to 154) compared with the same period in 2008. Comparison with the previous quarter (July-September 2010) shows a 17.6% decrease (187 reports in Jul-Sep 2010 vs. 154 reports in Oct-Dec 2010).

The number of Trust apportioned reports has remained less than the number of non-Trust apportioned reports for three quarters (from April 2010). The data for January-March 2011 will be published in June 2011.

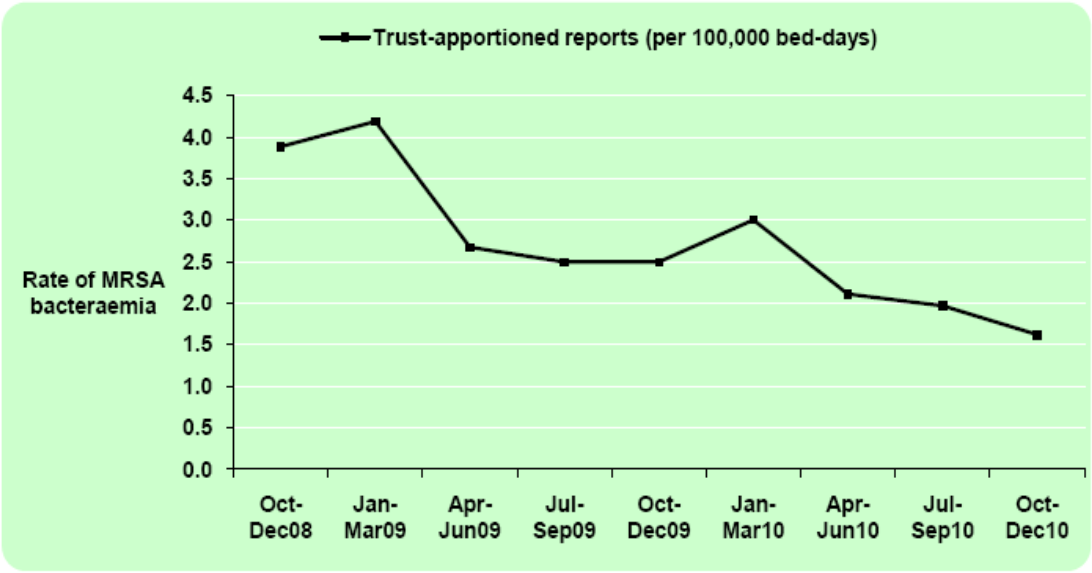
Figure 1: Quarterly counts of all MRSA BSI* reports for England, October 2008 to December 2010 (courtesy of the HPA)



*Bacteraemia and Bloodstream infection (BSI) are interchangeable terms

Among Trust apportioned reports (Figure 2) there has been a decrease in the rate of MRSA BSI from 3.9 per 100,000 bed-days in October-December 2008 to 1.6 per 100,000 bed-days in October-December 2010.

Figure 2: Rate of Trust apportioned MRSA BSI for England, October 2008 to December 2010



1.2.2) MSRA screening

April 2009 saw the introduction of MRSA admission/pre-admission screening for all patients undergoing elective surgical and investigative procedures. This has had major resource and operational implications. However, it seems unlikely that

this change will have contributed significantly to the continued reduction in MRSA BSIs in 2010/11 since the prevalence of MRSA colonisation among this group of patients is very low – in the region of 1.2%.

Many Trusts, including SaSH, took the decision to implement MRSA admission screening for all *emergency* patients earlier than required by the DH and have done so during 2009/10. Available data suggest the prevalence of MRSA in this group is higher – in the region of 5.2%. Even so, the patchy uptake and compliance with emergency screening across England means that it is difficult to conclude a direct causal relationship with the further substantial reduction in MRSA BSIs seen during 2010/11. As of January 2011, Trusts have been required to show 100% compliance with emergency screening, which may help to elucidate any causal relationships in future trends.

The final report for the NHS Scotland MRSA Screening Pathfinder Programme was published in February 2011. This presented and summarised the results of a one year pathfinder project for universal MRSA screening in NHS Scotland. The report showed a significant reduction in the prevalence of MRSA colonisation with concomitant reduction in overall numbers of MRSA infections. However half of patients identified with MRSA infections screened negative on admission. This information reinforces the need for continuing focus on standard infection control precautions for all hospital inpatients.

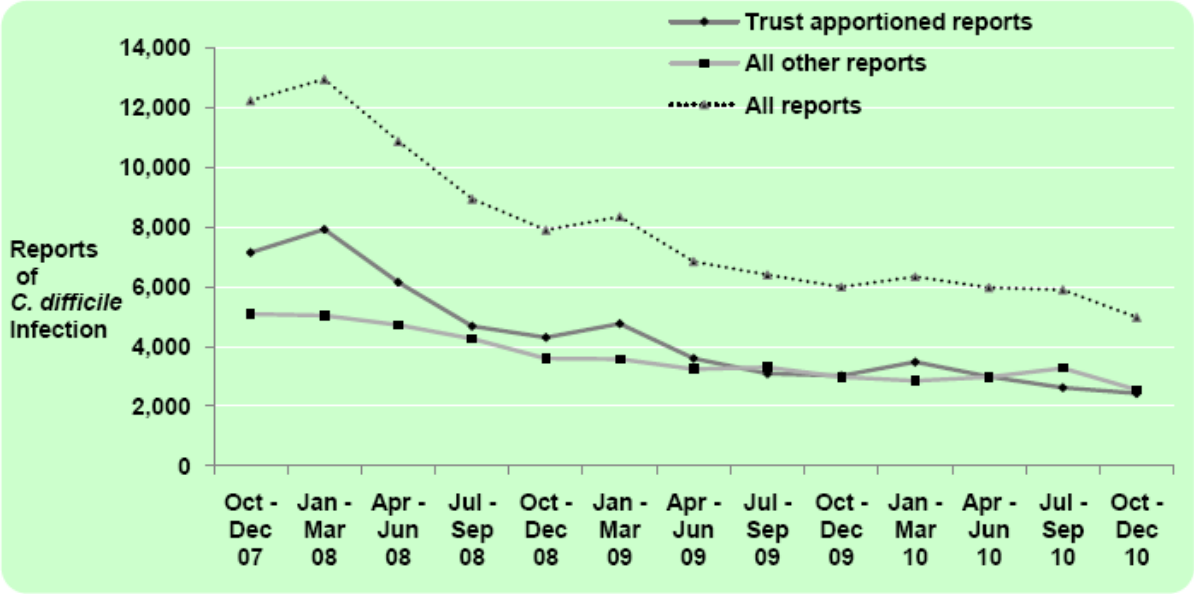
1.2.3) *Clostridium difficile* infection (CDI)

Since 2004, it has been a mandatory requirement to report all CDI in NHS acute Trusts in patients aged 65 and over. In April 2007 enhanced surveillance for CDI was introduced with requirement for mandatory reporting of all CDI in patients aged 2 years and older.

Nationally, the final figures for *C. difficile* infections for 2010/11 are not yet published. Figure 3 below shows the trend with time for the period October 2007 to December 2010. There has been an overall decrease of 15.6% in reports between Quarter 2 (July-September 2010) and Quarter 3 (October-December 2010). This is also borne out in figures for the rates of infection. With the exception of seasonal patterns, the overall trend for number of reports appears to be flattening. The numbers of Trust vs. Community apportioned cases appear to be converging.

Individuals aged over 75 years comprise the age group with the greatest burden of infection in both Trust and Community apportioned cases.

Figure 3: Counts of all CDI reports in England, October 2007 to December 2010 (courtesy of the HPA)



1.2.4) Code of Practice

The Code of Practice for Health and Adult Social Care on the Prevention and Control of Infections was modified in 2011. The IPCAS Group has incorporated relevant changes to the Annual Programme for 2011/12.

The main changes are as follows:

- Clarification of requirements of Matrons and CD's reporting to the board to include cleaning scores.
- Inclusion of the requirement to report infectious diseases covered by the Health Protection (Notification) Regulations 2010.
- Greater emphasis on the management and auditing of waste streams.
- Refers specifically to the disposal of sharps waste.

1.3) CQC Inspections relating to Hygiene Code

On 29th January 2010 the Care Quality Commission (CQC) carried out an unannounced inspection at SaSH relating to the Hygiene Code. Evidence was found that the trust breached the regulation to protect patients, workers and others from the risks of acquiring a healthcare-associated infection on three measures:

- Ensuring that the environment for providing healthcare is suitable, clean and well maintained

- Using effective arrangements for the appropriate decontamination of instruments and other equipment, which are detailed in appropriate policies

- Following appropriate policies and protocols on the control of outbreaks and infections associated with specific alert organisms (those that may give rise to outbreaks), specifically legionella.

The Trust was placed under close scrutiny, meaning that the CQC intends to make further inspection visits to ensure that improvements are being made. Based on the findings of the inspection, the Trust declared non-compliance with sections 1 c, d, e and 2 d, e, f, g of the Hygiene Code. The Trust committed itself to carrying out a number of actions, which were monitored at weekly HCAI Taskforce meetings and reported to the Board.

The CQC visited SaSH again on 18th February and 7th April 2010 as part of their close scrutiny activity to gain assurance that the Trust had taken the immediate action as outlined in the requirements. Assurance was provided and the CQC has subsequently announced that the Trust is now compliant with the Hygiene Code.

Since this period environmental monitoring has remained a high focus of the Infection Control Task Force, this is detailed later in the report.

2) Duties under the Code of Practice for the Prevention and Control of HCAI

The *Code of Practice* (Hygiene Code) lays out guidance for NHS organisations on the measures that should be in place, and the assurances that should exist, to ensure proper standards in the principles and practices of prevention and control of HCAIs throughout an organisation.

The first and foremost objective of the Trust's infection control strategy is compliance with that code of practice. Therefore, the IPCAS Annual Report for 2010/11 provides information to the Trust Board, to the patients of the Trust and to the public based on the domains of that code.

Duty 1: Effective Management Systems for Prevention and Control of HCAI

Duty 2: Clean and Appropriate Environment

Duty 3: Provide information to patients and healthcare providers on transfer

Duty 4: Prompt identification and management of patients with an infection

Duty 5: Gaining the co-operation of staff and others in preventing and controlling infection

Duty 6: Providing adequate isolation facilities

Duty 7: Access to Laboratory support

Duty 8: Policies and protocols for the prevention and control of HCAI

Duty 9: Protecting staff from HCAI and ensuring staff are suitably trained

2.1) Effective Management Systems for Prevention and Control of HCAI

2.1.1) Infection Prevention Control and Antibiotic Stewardship Group

The Trust Board has a Non-Executive Director with lead responsibilities for overseeing IPCAS. This individual is a member of the IPCAS Group.

The Chief Medical Officer is the DIPC (Executive lead for IPCAS) and chairs the IPCAS Group.

The IPCAS Group's Terms of Reference set out responsibilities for:

- Developing IPCAS strategy

- Carrying out oversight and scrutiny functions to ensure delivery of the IPCAS Annual Programme

- Reporting to the Trust Board on progress against the Annual Programme

- Keeping the Trust Board apprised of significant IPCAS risks, e.g. infection outbreaks

The IPCAS Group convened on the following dates through 2010-11, minutes of which are available as separate documents:

- 29th June 2010
- 27th September 2010
- 14th December 2010
- 15th February 2011

Infection Prevention and Control issues were reported regularly to the Trust's Management Board for Quality and Risk. A formal report was submitted monthly, which included headline HCAI data, activity against the Annual Programme objectives, and the results of audits. The minutes of the meetings were tabled regularly at the Management Board for Quality and Risk meetings.

2.1.2) Infection Control Task Force (ICTF)

The Infection Control Task Force has been in existence since April 2008, under the chairmanship of the Director of Infection Prevention and Control.

The Task Force is composed of the IPCAS Team, the Matrons for every department and Chief Nurses, representatives from Estates and Facilities, and other key departments. The group met fortnightly throughout 2010/2011.

The ICTF monitors:

- *Saving Lives* High Impact Interventions
- MRSA bacteraemia, CDI, MSSA and E.coli bacteraemia
- Antibiotic prescribing
- Root Cause Analysis (RCA) learning points and actions
- Facilities cleaning scores
- Matron's Environmental audits
- Compliance with the Hygiene Code

The Taskforce also monitors cleanliness audit scores from the national specifications for cleanliness 2007, and the Matron's weekly environmental audits.

2.1.3) IPCAS Team

The Trust has an IPCAS Team comprising:

- DIPC (Medical Director)
- Consultant Medical Microbiologist and Trust Infection Control Doctor
- Consultant Medical Microbiologist and Lead Microbiologist for Antibiotic Stewardship
- Consultant Medical Microbiologist and Lead Microbiologist for the Microbiology Laboratory
- Lead Nurse in Infection Prevention & Control (IPC)
- Two IPC Nurses
- Practice Development Nurse in IPC
- Antimicrobial Pharmacist
- Operational Manager (scientific) for the Microbiology Laboratory
- IPCAS Programme Manager
- IPCAS Secretary

The IPCAS Team's functions are governed by Terms of Reference and relate to the day-to-day running and monitoring of IPCAS principles and practices throughout the Trust. The Team meets every two months and is directly accountable to the IPCAS Group. Team minutes are available separately:

The IPCAS Team:

- Provides specialist clinical advice on any issue relating to infection prevention-control and antibiotic stewardship to

  - Clinical staff within the Trust and outside
  - Patients and the public
  - Operational and executive managers of the Trust
  - The Committees on IPCAS, Healthcare Governance and Risk Management
  - The Trust Board

- Is integral to the Trust's Infection Control Task Force

- Undertakes continual infection surveillance and co-ordinates the Outbreak Control Group through a laboratory-base ward liaison service

- Produces and reviews Trust policy on all areas relating to infection prevention-control and antibiotic stewardship

- Audits practices and standards of clinical staff and clinical areas

- Undertakes a programme of Education, Training and Practice Development to all clinical and support staff

- Manages information systems to monitor and feed back to Directorate clinical and operational leads performance on HCAIs, *Saving Lives* interventions, root cause analysis, antibiotic prescribing practices, etc.

- Produces the Annual Report and Annual Programme

- Maintains and manages the IPCAS Risk Register

2.2) Policies and protocols for the prevention and control of HCAI

The Trust is required to have and adhere to policies and protocols for the prevention and control of HCAI. The Trust has an Infection Control Manual which contains a wide variety of policies and procedures. All IPCAS policies and guidelines are readily accessible via the Microbiology and Infection Control website on the Trust's intranet, and are reviewed on a biannual basis. The following policies were reviewed throughout 2010/2011:

- Policy on the management of intravascular catheters
- Policy on decontamination: Routine decontamination of ward environment and the clinical environment
- Hand hygiene
- Diarrhoea and vomiting, including norovirus
- Policy for MRSA screening and management
- Policy for the control of MRSA on the Neonatal Intensive Care Unit
- Suspected viral haemorrhagic fever
- Policy on single use medical devices

3) Key indicators

The IPCAS Group, Task Force and IPCAS Team use the following key indicators as a means of monitoring the success of measures to identify HCAIs (surveillance and reporting) and the standard of infection prevention and control practices (containment and management):

- MRSA bloodstream infections
- *Clostridium difficile* infections
- Outbreaks of HCAI
- Orthopaedic surgical site infections

3.1) MRSA bloodstream infections (BSI)

In 2010-11, the Trust reported 14 MRSA BSI episodes. Each case underwent formal root cause analysis (RCA) using a tool and methodology that were agreed as part of the "whole system" HCAI action plan.

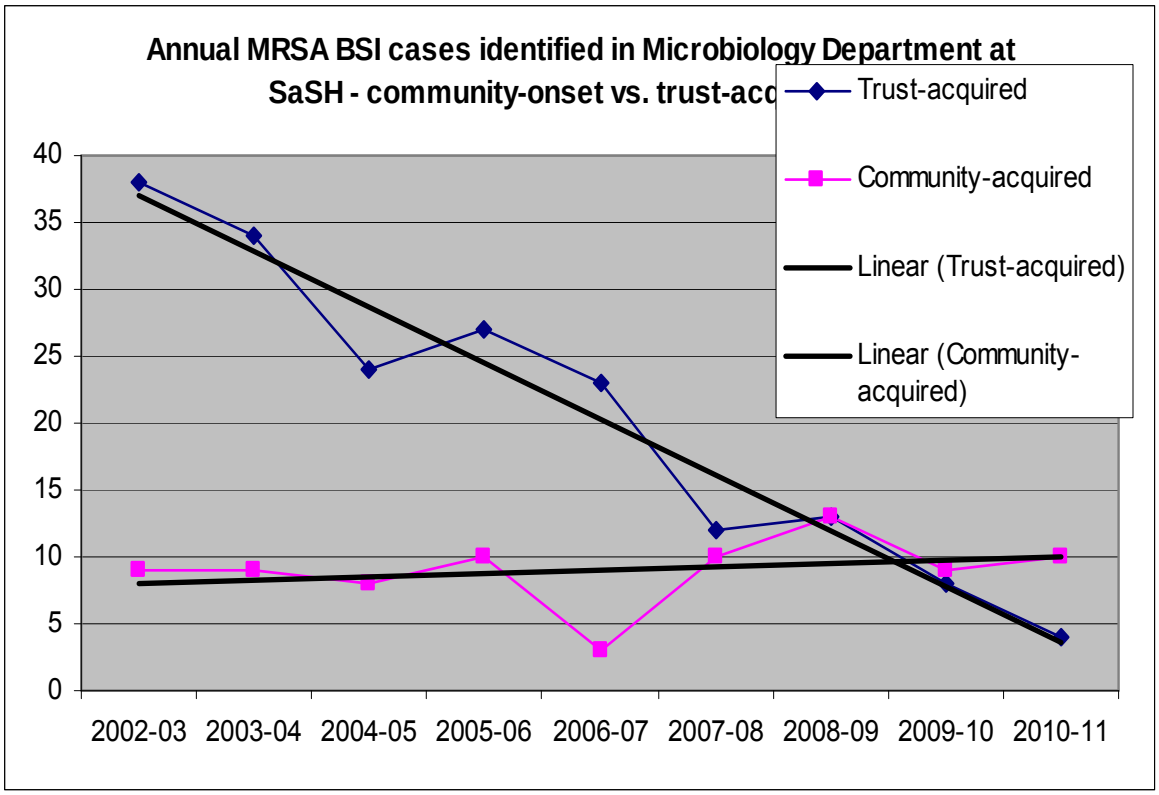
For cases that arose 3 or more days after date of admission, the RCA was undertaken within a multi-disciplinary forum chaired by the DIPC or deputy and informed by a Consultant Medical Microbiologist and risk management team.

For all non-Trust apportioned cases, these cases were apportioned to the community, and RCA was undertaken under the guidance of the appropriate PCT DIPC.

Completed RCA documentation was signed off jointly by the acute Trust PCT and PCT DIPC before being forwarded to the SHA. For Trust apportioned cases, actions that resulted from RCA were tracked by the Infection Control Task Force.

Four of the 14 MRSA BSI episodes were apportioned to the acute Trust (compared with 8 of the 17 in 2009/10). This represents a clear and sustained reduction in the Trust apportioned number at SaSH as can be seen in Figure 4 below. The average length of time between cases has significantly increased from 26 days during 2008/09 to 91 days during 2010/11. The number of community apportioned cases has not seen the same reduction, and in fact the trend is very slightly upwards.

Figure 4: SASH Trust vs. non-Trust apportioned MRSA BSIs to end 2010-11



Of the four Trust apportioned MRSA BSI cases:

- One was deemed not to have been preventable (i.e. “unavoidable”) by RCA because of the seriousness of the patient’s underlying condition in the presence of long-standing MRSA colonisation. In this case it is not clear whether this was a clinically significant BSI;

- Two were deemed potentially preventable (i.e. “avoidable”). One relating to poor central venous catheter line management and the other relating to an indwelling urinary catheter. In both of these cases, documentation of device management was unsatisfactory.

- Documentation pertaining to the final case is still awaited as the case is the subject of an SUI. The BSI was secondary to prosthetic hip implant infection.

Learning points and actions from these cases have been cascaded.

Although decrease in the numbers of Trust apportioned cases over time implies that learning points and actions are being successfully implemented overall, where preventable cases are still occurring they are related to poor documentation of indwelling devices, unrecognised MRSA status by all staff and subsequent poor choice of antibiotics for treating infections in patients who are colonised with MRSA. These are on-going risks on which focus will be maintained.

The MRSA BSI target for SaSH for 2011/12 is 4 Trust apportioned cases for the year. The SHA has stipulated that none of these be unavoidable. It must be noted that at the time of writing, there are no nationally agreed definitions for avoidable vs. unavoidable MRSA BSI, and local definitions will continue to be used.

3.2) *Clostridium difficile* infections (CDI)

2010/11 saw a further reduction in the number and rate of Trust apportioned CDI, and both the national and local stretch reduction targets were met (136 and 89 respectively). The total number of cases for the year was 70. This was a continuation of the downward trend from previous years, which has seen a reduction in absolute numbers of 63%.

Year	Trust apportioned CDI (number)	Trust apportioned CDI rate (cases per 1,000 bed days)
2007/08	187	1.07
2008/09	99	0.57
2009/10	91	0.52
2010/11	70	N/A

Twenty-seven of the 70 cases (38.6%) died. In 10 (14.3%) of these cases, CDI was recorded on either Part 1 (2 cases) or Part 2 (8 cases) of the death certificate.

For the two cases in which CDI was recorded on Part 1 of the death certificate (i.e. attributable cause), formal RCA was undertaken. In one case, a diagnosis of severe colitis was made at post-mortem. Of note in this case, the clinical history prior to death was not at all in keeping with the post mortem findings. The second case occurred on a background of ulcerative colitis and there remains uncertainty as to the role of CDI over and above this.

There were three episodes of 2 linked cases which were initially declared as “periods of increased incidence” (PII). Two of these episodes were subsequently declared as outbreaks and SUIs (see Outbreaks below). In all episodes, enhanced infection control measures were successful in preventing further cases.

The target for Trust apportioned CDI cases for SaSH for 2011/12 is 50.

3.3) Outbreaks of infection

3.3.1) *Clostridium difficile* infection

There were three clusters of CDI during 2010/11. In each cluster, ribotyping supported the occurrence of cross infection having occurred in 2 cases. None of these were ribotype 027.

The first cluster involved two orthopaedic wards with 6 cases identified within a 2 week period in June/July 2010. Only two of 6 cases were subsequently confirmed as the same ribotype (ribotype 078). Delay to isolation of symptomatic case was the identified root cause of this episode of cross-infection. This is documented in a separate SUI report, the learning and actions for which have been cascaded via ICTF.

Two further episodes of presumed cross infection were identified on two Elderly Care wards. In the first episode (January 2011), the ward was initially put under "period of increased incidence" (PII) precautions until the ribotyping results were available. By the time this information provided the evidence to support cross infection (2 of 4 cases), there had been no further cases on the ward, and two of the patients had in fact been discharged home. Effectively, therefore, the outbreak was over before it was declared, the PII control measures being effective. In the second episode (March 2011), an SUI was declared before confirmation of ribotyping results. Two of 5 cases were subsequently confirmed as being of the same ribotype (ribotype 015). These two cases had been nursed simultaneously in a cohort bay during the second wave of the Norovirus outbreak. The full findings are documented in a separate SUI report.

3.3.2) Norovirus

In total during the period October 2010 – March 2011 there were:

Number of suspected cases: Patients	267
Number of suspected cases: Staff	41
Number of confirmed outbreaks	18
Number of suspected outbreaks	10
Number of wards that were closed to new admissions	17

These numbers were broken into two distinct waves; from 28/10/10 to 27/01/11 and then from 7/03/11 to 30/03/11. The second wave although much shorter involved a greater number of cases per day (4.5 cases per day vs. 1.7 cases per day). See Figure 1 in Appendix 1.

	1st Wave (92 days)	2nd wave (24 days)
Number of suspected cases: Patients	160	107
Number of suspected cases: Staff	30	11
Number of confirmed outbreaks	10	8
Number of suspected outbreaks	8	2
Number of wards that were closed to admission	10	7

The ward areas with the most cases were:

	Number of suspected cases	Number of confirmed outbreaks	Number of ward closures
Meadvale	43	2	2
Nutfield	39	2	2
Leigh	31	1	2
Newdigate	29	2	2
Abinger*	26	2	2

(* only affected by first peak)

National Norovirus data

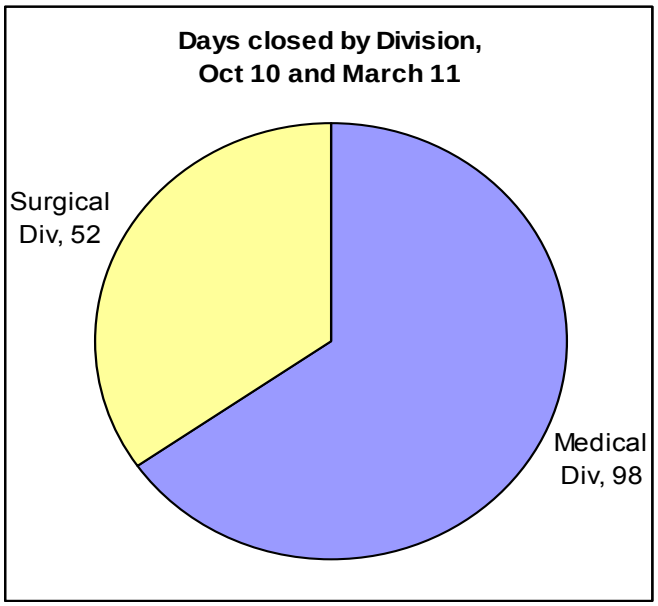
Assuming that those organisations using the reporting system report consistently, the number of outbreaks rose sharply through October to January, dipped in February then rose to a peak in March. Therefore, the peaks experienced at SASH reflect the national norovirus picture.

	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11
Outbreaks reported nationally	31	71	171	193	161	238

Operational Impact

	1st Wave (92 days)		2nd Wave (24 days)	
Ward	Days closed	Days observation/ part closed	Days closed	Days observation/ part closed
Meadvale	17	12	12	0
Nutfield	9	7	9	2
Leigh	0	9	6	12
Abinger	20	4	0	0
Newdigate	13	0	9	1
Capel	11	11	0	0
Tandridge	10	0	3	0
Holmwood	7	5	0	0
Buckland	0	3	6	0
SAU	0	8	0	0
Horley Bay	5	0	0	0
Tilgate	0	0	3	2
ED Obs	0	0	5	0
Woodland	0	0	5	0
AMU	0	4	0	0
Brook	0	0	0	3
Total	92	63	58	20

Days closed by Division Oct 2010 and March 2011



Staff sickness

Staff days lost October 2010-January 2011

Absence Reason	Oct-10	Nov-10	Dec-10	Jan-11
Flu-like symptoms	154	145	454	360
Diarrhoea/Vomiting	**101**	**213**	**179**	**174**
Coughs/Colds	214	172	224	157
Gastro-intestinal	139	132	98	131
Respiratory	113	56	120	124
Ears, Nose and Throat	75	87	114	82
Infections	34	12	4	30
Stress/Anxiety	201	212	279	221
Headache/Migraine	88	68	39	59

Lessons Learned

Factors such as patient flow, bed occupancy and intra-hospital movement of patients contribute to the effective management of hospital outbreaks of norovirus. Work is currently being undertaken to improve patient flow throughout the Trust. This work should have a beneficial impact on the management of norovirus in future years. During the outbreak a need was

identified to improve communication to doctors and the Temporary Staffing Bureau regarding areas affected by outbreak and outbreak measures. This was addressed using a daily reminder message over the internal pager system to all junior doctors. The IPCAS nurses visited the Temporary Staffing Bureau on a daily basis in order to improve communications of which wards were affected.

Lessons learned will be discussed at the multidisciplinary Norovirus Planning meetings, and incorporated into the 2011/2012 Norovirus Action Plan.

3.3.3) Panton-Valentine Leukocidin *Staphylococcus aureus* (PVL-SA)

PVL-*Staphylococcus aureus* are strains of *S.aureus* that produce the PVL-toxin. These may be MRSAs. Pandemic clones of both PVL-MSSAs and PVL-MRSAs have emerged and become a significant cause of spontaneous skin or soft tissue infection, with a high rate of recurrence and spread to close contacts. Occasionally infections may be severe (e.g. necrotising pneumonia or fasciitis, and septic shock). Although still relatively uncommon in the UK, outbreaks of both community and nosocomial infections have been reported.

During the months of February and March 2010, a cluster of PVL-MRSA spa type 019 (the so-called South West Pacific Clone) cases was identified within the Trust. This comprised a total of 5 patients and 2 staff members. An outbreak and SUI were declared and are detailed in a separate report. Expert advice was sought from members of the Central Health Protection Agency with whom the Outbreak Group worked closely to successfully manage and contain the situation. Three patients died but in only one of these was MRSA infection deemed contributory. Details of this case have been documented in a separate SUI report. At the time of this report writing, no further cases have been identified since 17th March 2011.

3.4) Orthopaedic surgical site infections (SSI)

The Trust participates in the Health Protection Agency's Surgical Site Infection Surveillance Scheme (SSISS) for joint replacement procedures, which mandates the undertaking of prospective surveillance for one quarter every year.

The aim of SSISS is to enhance the quality of patient care by encouraging hospitals to use data obtained from surveillance to compare their rates of surgical site infection (SSI) over time and against a benchmark rate, and to use this information to review and guide clinical practice.

SASH was identified by the Health Protection Agency as being above the 90th percentile for hip replacement. An action plan has been developed to address this.

Number of operations and rates of SSI by category

Operation	Knee replacement	Repair neck of femur	Hip replacement
SASH Number April –June 2010 and % infected	51 0%	131 2.3% (3 infections)	61 9.8% (6 infections)
SASH Number last 4 periods and % infected	257 0.4%	463 1.7%	340 2.4%
Number all hospitals and % infected	165533 1.1%	23281 1.9%	157250 1.1%

3.5) Influenza

During the months of December 2010 and January 2011, there were approximately 300 laboratory test requests for influenza testing at SASH. There were 65 laboratory confirmed cases of influenza, 38 (58%) of which were the Influenza A/H1N1 (2009) 'swine flu' strain (See figure 5 below).

Thirty-two patients with confirmed swine flu required admission over this 2 month period (compared with 40 cases for an 8 month period in 2009-10). The demographics differed from those admitted in 2009-10, with the highest number of cases falling within the 17-44 year age category. Of those admitted, 8 patients required ventilatory support in an intensive care (ICU) setting, all of whom were adults. There were 7 deaths, all were adults, 5 of whom had required ventilatory support on ICU and 2 of whom had co-infection with other community acquired respiratory pathogens. Three of the admitted cases were pregnant, none of whom died.

Due to the number of admissions with suspected influenza during this period, a cohort bay on the Respiratory ward was in use for a short time.

Figure 5: All cases of laboratory confirmed influenza SaSH Dec 10 to Jan 11

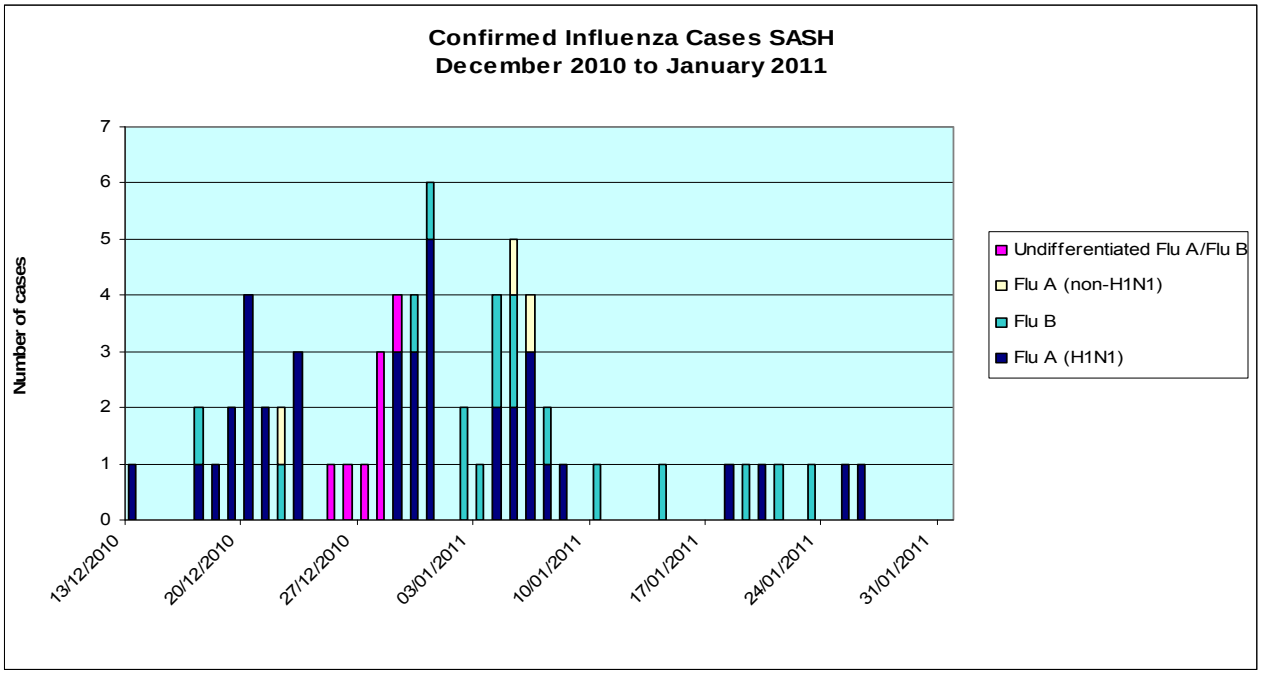


Table: SaSH Cases of Influenza A/H1N1(2009) requiring admission

Age group	Number of cases (%)	ICU admissions	Deaths
< 1 year	5 (16)	-	-
1 – 5 years	3 (9)	-	-
6 – 16 years	4 (13)	-	-
17 – 44 years	11 (34)	5	3
45 – 60 years	5 (16)	3	2
61 – 65 years	3 (9)	-	1
> 65 years	1 (3)	-	1

3.6) National Reporting of Infection

3.6.1) Mandatory reporting

The Trust fully complies with the Department of Health's mandatory surveillance and reporting schemes for the following organisms/infections, as evidenced by the Health Protection Agency's reporting system:

- MRSA bloodstream infection
- MSSA bloodstream infection
- *C. difficile* infection
- Glycopeptide-resistant enterococcal (GRE) bloodstream infection
- Surgical site infection surveillance

Methicillin sensitive *Staphylococcus aureus* Bloodstream infection (MSSA BSI)

From 1st January 2011, all Trusts are required to report cases of MSSA BSI. Cases are apportioned to Trust and Community as for cases of MRSA BSI. As yet no targets have been allocated but it is expected that data collected over the forthcoming year will inform risk areas and objective setting in the future. In the first 3 months of 2011 there were 9 cases of MSSA BSI, 2 of which were Trust apportioned. Although Trust apportioned, clinical evidence suggests that these infections were present prior to hospital admission.

***Escherichia coli* Bloodstream Infection (*Ecoli* BSI)**
As of July 2011, the Trust will be required to report all *E.coli* BSIs to the HPA.

Reporting practices are governed by:

- Policy for the Surveillance of "Alert" Organisms and Healthcare-Associated Infections http://web/mic/ppg/a/a5.pdf

3.6.2) Voluntary Laboratory reporting

The Microbiology Laboratory provides voluntary reports to the Health Protection Agency on a range of organisms and samples, including:

- Blood culture isolates
- Stool culture isolates
- Respiratory viruses
- Blood-borne viruses
- Sexually transmitted diseases

These data are conveyed using the HPA's electronic reporting system, *Co-Surv*. Reporting practices are governed by CPA-accredited laboratory standard operating procedures.

3.6.3) Statutory Laboratory reporting

In October 2010, all laboratories were required to comply with new statutory requirements for reporting of Notifiable Infectious diseases to the Health Protection Agency. This is fulfilled largely by electronic reporting via Co-Surv. Some reporting is still performed by postal notification.

3.7) Contact tracing

The IPCAS Team has assisted with a number of contact tracing exercises throughout the year. These exercises were as a result of patients with infectious diseases not being isolated in a timely fashion, most often due to the diagnosis not being immediately apparent or suspected. In none of these episodes has there been definitive evidence of cross infection having occurred.

Infection	Number of episodes
Tuberculosis	7

Mumps	1
Measles	1
Varicella zoster (chickenpox)	3

4) IPCAS audit

A programme of audit is in place to ensure that key policies and practices are being implemented appropriately. The following is a summary of the key IPCAS policies which have been audited in 2010/2011:

4.1) Saving Lives

The ICTF monitors the programme of weekly *Saving Lives High Impact Interventions* audits in every clinical area. This has been in place since 2008, with the aim of clinical areas taking local ownership over monitoring compliance, and taking action where reduced compliance is evident. Audits are carried out weekly with a cross-audit occurring the first week of every month. Audit results form part of key discussion at ICTF meetings so progress with compliance is monitored, and ongoing high standards of infection prevention and control are promoted with key clinical procedures and practice. The High Impact Interventions are:

- Hand hygiene
- Intravenous cannula
- Urethral catheters
- Central venous catheters
- Ventilated patient/tracheostomy
- Renal dialysis ongoing care
- Surgical site infection care bundle

The results are monitored and reported via a "RAG-rated" balanced scorecard system so that areas of poor performance could be identified and given support for improvement.

The table below shows percentage compliance with Saving Lives Care Bundles throughout 2010/11. Tables 2 and 3 show compliance in the specialist areas of Theatres and the Intensive Care Unit (ICU).

Table 1: Saving lives and hand hygiene (wards/Clinical areas, not theatres)

Hand Hygiene	98%
IVC Care	96%
UC Care	99%

Table 2: Saving Lives compliance Theatres; East Surrey, Redwood and Crawley Day Surgery Unit (DSU)

Hand hygiene	100%
IVC insertion (central/peripheral)	94%
Urinary catheter insertion	100%
Surgical site infection care bundle	99%

Table 3: Saving Lives compliance ICU

CVC on-going care	96%
Ventilated patient / Tracheostomy - Regular Obs	93%
Ventilated patient / Tracheostomy - On-going Care	96%
Renal dialysis (Haemofiltration) on-going care	91%

Table 4: *Clostridium difficile*

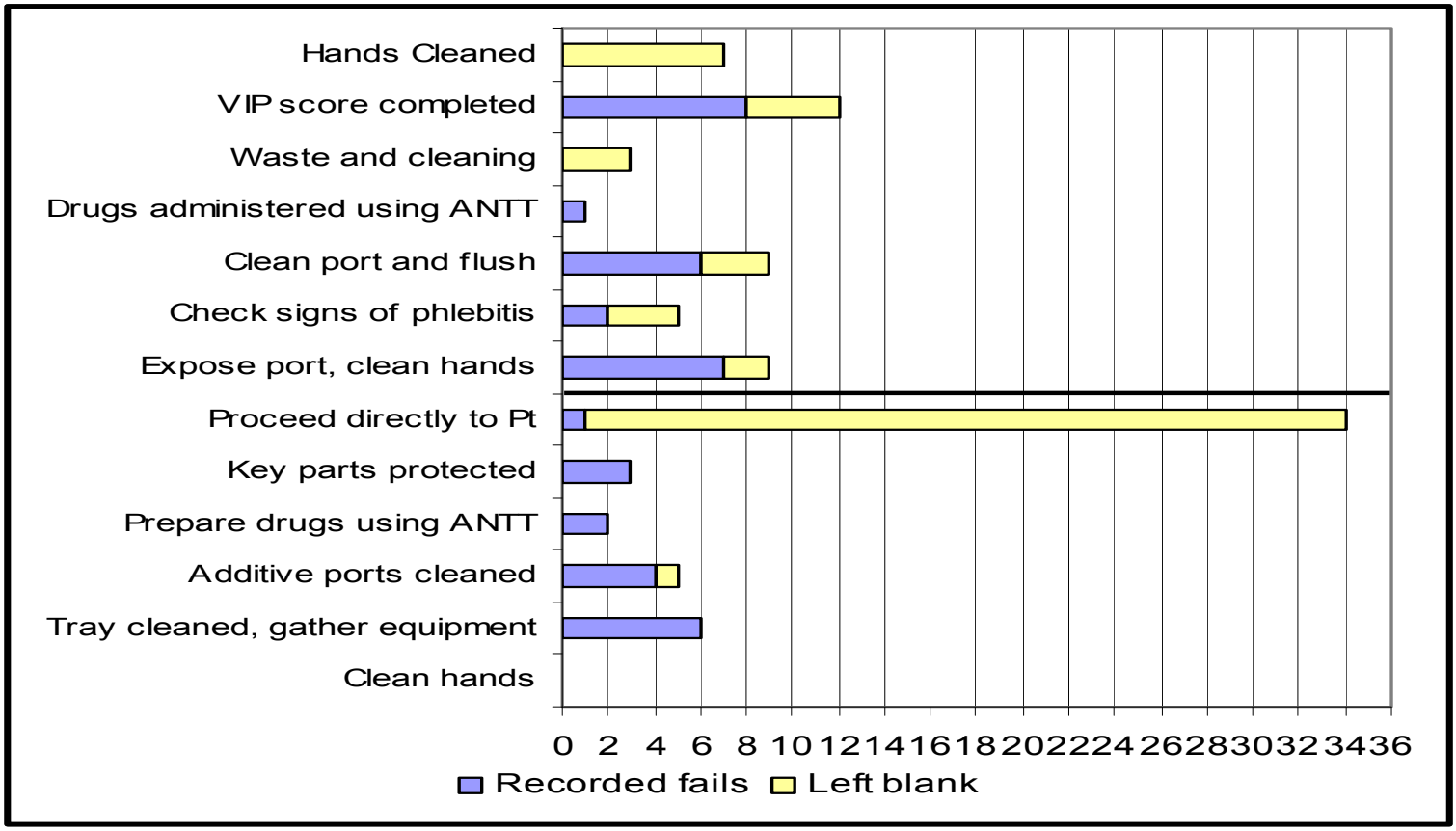
Clostridium difficile care bundle	100%

4.2) Aseptic non-touch technique (ANTT)

A system of 'Train the trainers' is in place to monitor aseptic technique throughout in-patient areas. A qualified nurse in every area has been trained to monitor and audit aseptic technique in relation to the administration of intravenous drugs. Thus, the technique is standardised throughout the Trust. ANTT audit results are examined on a monthly basis and any issues identified are taken forward by the Divisions.

Table 5: Summary of Aseptic non-touch technique (ANTT) audits 2010-2011

Audits returned	471	
Fails (one or more)	31	7%
Fails and left blank (one or more)	16	3%
Left blanks, no fails (one or more)	41	9%
Passed	383	81%



Further information on compliance figures pertaining to specific areas can be obtained via the IPCAS shared folder or through the IPCAS Team.

4.3) Sharps Audit

An audit of sharps equipment and practice was carried out in October 2010 by an external representative from Frontier Medical.

Principle Objectives

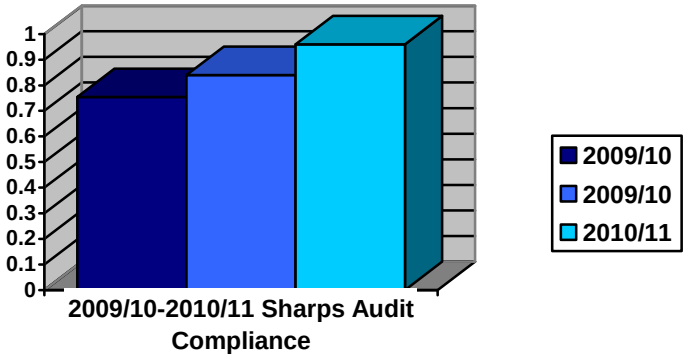
- To audit each clinical area on sharps safety encompassing the three areas of equipment, practice and awareness
- To ensure that sharps containers are used and fit for their intended purpose
- To ensure clinical areas have safe systems in place to prevent sharps related injuries
- To follow up and educate areas where practice was not to the required standard

Results

In total 62 areas were inspected. The overall conclusion is that sharps practice was excellent. Although, there were areas where attention was needed to enforce basic sharps awareness training and practice, since 2009 these are the same areas where significant improvements in compliance have been noted.

Criteria	*2010/11 compliance*	*% improvement since 2009/10*
Correct assembly of containers	89%	25%
Correct labelling of containers	94%	39%
Use of temporary closure facility	87%	74%

A rise in compliance with standards of safe sharps practice is reflected in the average audit findings between 2009/10 and 2010/11 (See chart below).



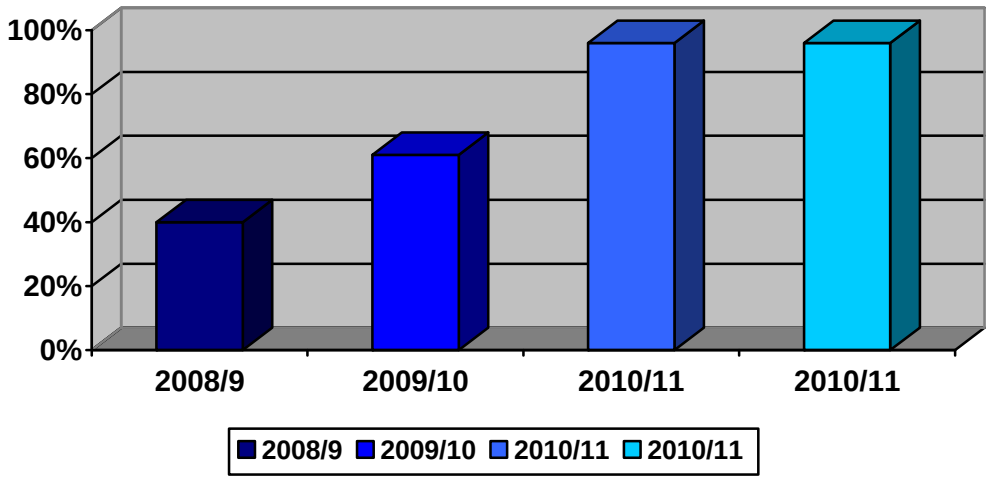
In all audits clinical areas have been 100% compliant with disposal of syringes without detaching needles, being re-sheathed or bent, and 96-100% compliant with not overfilling sharps containers; two recognised causes of sharps injuries. 100% compliance with the availability and use of Near Patient Safe Disposal Equipment was observed at the time of October 2010 audit. In all areas awareness surrounding safe sharps practice was excellent.

Any areas of concern were raised with the clinical area at the time of audit. Audit findings were fed back through the ICTF. The IPCNs continue to work with Frontier in supporting wards with safe sharps practice. This is reflected also within IPC education and training.

A further audit of sharps practice was carried out in April 2011 findings of which will be contained within 2011/12 annual report.

4.4) Commode Audit

An audit was undertaken in October 2010 (the second audit in 2010/11) by an external auditor from Vernacare. This was to ensure commodes were fit for purpose, cleaned and maintained correctly and that they are available in sufficient quantity. 78 chairs were audited across 23 clinical areas. At the time of audit no chairs required replacement and compliance with cleaning was 96%. This was consistent with the March 2010 audit. Results since 2008 reveal a significant improvement and rise in standards of commode cleaning (See chart).



Feedback of audit findings is provided at ICTF and at Governance meetings. Ongoing assurance of commode cleanliness continues through incorporation of checks within the Matrons monthly audit and audits carried out by the Infection Prevention & Control Nurses.

The importance of maintaining high standards of commode cleanliness continues to be incorporated within infection prevention and control training and a further audit is scheduled for 2011/12.

4.5) Peripherally inserted central lines (PICC) and midline audit

35 PICCS and 10 midlines were inserted between January – June 2010, of which 38 were inserted by Jill Clarke, IV Specialist Nurse. Approximately 410 bed days were saved (based on earlier discharge due to patients receiving antibiotics in the community via a PICC or midline).

4.6) Audit of care pathway for *Clostridium difficile* (CDI)

A Care Pathway for *Clostridium difficile* is completed for every patient who is confirmed positive microbiologically. A total of 10 sets of medical records were audited across the directorates as part of a retrospective review of robustness of form completion. The audit examined whether a CDI care pathway was evident in the patient records, whether the discharge summaries were complete, and whether the 'All Purpose Transfer Form' had been completed where appropriate. Following the audit, an action plan was agreed to further revise the CDI pathway and that the IPCAS nurses closely monitor use of the form during CDI ward rounds.

4.7) MRSA screening

National and Trust policy dictates that the majority of both Elective and Emergency admissions must be screened for MRSA colonisation. The exceptions are dictated by the department of Health and are detailed in Trust policy. Screening for all emergency admissions was a National target due by 1st January 2011. An emergency screen is only carried out once there has been a formal decision to admit. Screening compliance throughout 2010/11 is as follows:

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Elective admissions screened	108%	110%	107%	118%
Elective admissions with positive result	0.9%	0.7%	1.1%	1.1%
Emergency admissions screened	41%	88%	98%	102%
Emergency admissions with positive result	4.7%	4.3%	4.1%	3.7%

The statistic is based on number of relevant admissions vs. number of screens so it is possible to record more than 100% (repeat screens and delays in admissions).

4.8) MRSA Suppression protocol

An audit of MRSA suppression protocol was carried out to ensure that MRSA suppression is given according to policy, and is documented appropriately. Results show an improvement from last year. The Infection Prevention and Control team will continue quarterly checks of MRSA suppression protocol and ensure results are fed back to the HCAI Taskforce and Divisional Governance committees. The IPC team will continue to raise any identified issues on ward rounds and through training.

4.9) Source isolation

Criterion 7 of the Health & Social Care Act (2008) states a requirement that a healthcare provider should ensure that it is able to provide, or secure the provision of, adequate isolation precautions and facilities to prevent or minimise the spread of infection. All wards were visited by an infection prevention and control nurse during an audit carried out in February 2011. All patients with an infection risk e.g. diarrhoea, MRSA, ESBL etc. were risk assessed for their requirement for source isolation. IPCNs recorded whether relevant patients were isolated effectively and whether robust isolation precautions were in place. Following the audit a recommendation has been made to the Trust to increase and improve provision for source isolation.

4.10) Transfer of infectious patients

In April 2010 the 'Inter-healthcare Transfer Form' was in use for every patient with a suspected or confirmed infection risk when transferred to another healthcare provider. Following an audit of the use of this form, it was agreed to include a section on infection control in the Trust's 'All Purpose Transfer Form', rather than use a dedicated form for this purpose. This change took place in June 2010.

5) Antibiotic Stewardship

5.1) Antibiotic stewardship team

- There have been no major changes in the composition of the antibiotic stewardship team in the past year
- The trust antimicrobial pharmacist continues to undertake both antimicrobial pharmacy and general pharmacy roles, and this limits the time available for antimicrobial pharmacy activity
- The antimicrobial pharmacist needs to undertake postgraduate training in antibiotic stewardship to facilitate the development of the programme. Bursary funding has been applied for
- Data support is required for antibiotic consumption reporting – a business case is to be written for pharmacy JAC programme

5.2) Trust antibiotic strategy and progress review

The current trust strategy for prudent antimicrobial use runs for the period Oct 2009 – Oct 2012. Actions in many areas are now complete. Those ongoing include initiatives in education & training, data support, restriction system for antibiotics.

The trust antibiotic stewardship programme was assessed using the ASAT tool by the SHA antimicrobial pharmacy lead during the year. The score for 2010/11 was 78%, 8% higher then the previous year. Areas targeted for improvement include training and education, and provision of information to patients and relatives.

Acute Hospital Antimicrobial Self Assessment Tool (ASAT)
SASH 2009/10 & 2010/11

Section number	Contents of section	Score for year		Maximum score
		2009/10	2010/11	
1	Antimicrobial management within the trust	8	9	9
2	Operational delivery of an antimicrobial strategy	37	38	40
3	Risk assessment for antimicrobial chemotherapy	4	5	6
4	Clinical governance assurance	9	11	12
5	Education and training	15	18	31
6	Antimicrobial pharmacist	8	9	12
7	Patients, carers, and the public	10	11	19
Overall		**91 (70%)**	**101 (78%)**	**129**

5.3) Policies and guidance

- The antibiotic policy is due for revision by the end of 2011 – this process will commence in the summer

- Interim guidance on antibiotic prophylaxis in orthopaedic surgery was issued in July 2010 to reduce selective pressure for *C.difficile*
- An A4 format summary of the policy was issued in August 2010 – this was colour coded for relative *C.difficile* risk of antibiotics (high, medium, low), and the *C.difficile* management guidance was included in the summary
- A credit card sized antibiotic mini-guide (summary of trust guidance) was developed – these have proved popular with doctors
- Revised guidance on antibiotic use in children is in the process of development

5.4) Surveillance and monitoring

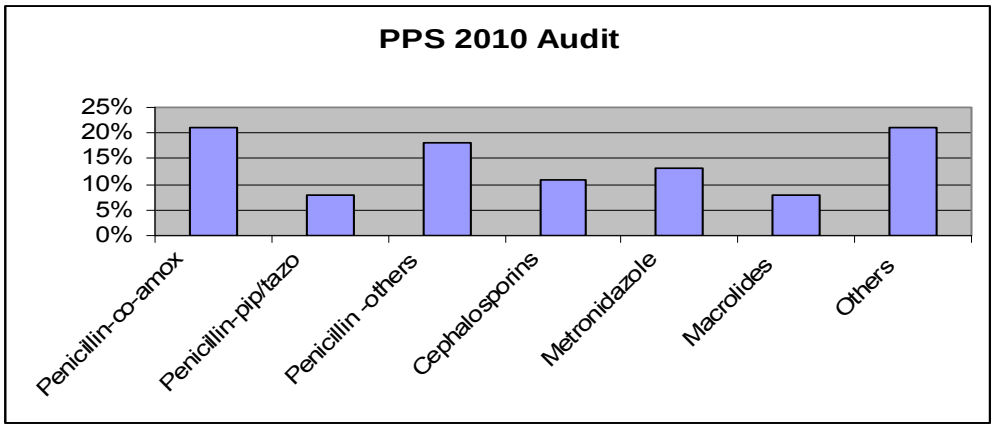
A series of antibiotic audits was carried out during the year:

- **Good Antibiotic Prescribing (GAP) ward audits**

41 GAP ward audits were undertaken throughout the year. The overall scores average ≥ 70% in the main target directorates (Medicine and Surgery). There was a slow but upward trend of improvement in compliance with the Antibiotic Stop/Review and Indication Policy. The GAP audit collection form has been modified (to be called GAP II) taking into account the care bundle approach advocated by the Department of Health.

- **Antibiotic point prevalence study**

The annual point prevalence study was carried out in September 2010. 495 patients were audited and 150 (30%) were on antibiotics. The figure below showed the antibiotics prescribed.



89% of antibiotic use was compliant with trust antibiotic guidelines. The proportion of patients on antibiotics was greatest in Medicine (60%) followed by Surgery (30%) and WACH (10%). The number of patients receiving more than one antibiotic varied significantly by ward. Documentation of clinical indication and duration continues to show progress as seen in the following table.

PPS audits: AB stop/review & duration policy

Overall SASH					
Antibiotic stop/review & duration policy	**Antibiotic prescriptions with**	**Sep-08**	**Nov 08**	**Feb 2010**	**Sep-10**
		(n = 172)	(n =189)	(n = 127)	(n=150)
% of compliance	Indication & duration	5%	17%	31%	43%
% of non-compliance	No indication & duration	73%	56%	52%	34%
	Indication only	2%	11%	6%	10%
	Duration only	20%	16%	11%	13%
Total non-compliance		**95%**	**83%**	**69%**	**57%**

% compliance	Nov-08	Feb-10	Sep-10
Med	20%	39%	43%
Surg	14%	32%	51%
WACH	12%	0%	20%

% of non-compliance	Nov-08	Feb-10	Sep-10
Med	80%	61%	57%
Surg	86%	68%	49%
WACH	88%	100%	80%

- **Targeted audit – Co-amoxiclav (augmentin):**

One targeted antibiotic was conducted in July 2010. The audit showed the majority of patients receiving co-amoxiclav were in medical wards. Patients received co-amoxiclav both IV and orally with an average time for IV to oral switch of 2.9 days as expected. Co-amoxiclav was assessed as guideline-compliant in around two thirds of patients, those not were mainly respiratory tract infections.

- **Antibiotic missed doses**

A one day point prevalence audit on omitted or missed antimicrobial doses over the previous 24hour period was carried out on 25th November 2010. 365 patients were audited and 43% were on antimicrobials with a total of 621 antimicrobial doses included in the study. The audit found 21 (3.4%) doses were omitted in total. Of the 21 doses omitted, 11 (52%) were first doses. When doses were omitted, the reasons were found to be: patient was away from ward (19%); dose was not signed by nurses (19%); drug not available (19%); patient refused (10%); no route (5%) and other reasons (29%) which includes nurse not aware of the drug being prescribed, patient was nil by mouth, and patient's bowel open. Improvements to reduce this will be to ensure proper documentation from nurses when antibiotic was given to patients and following the medicine management policy for obtaining drugs out of hours.

5.5) Consumption data report

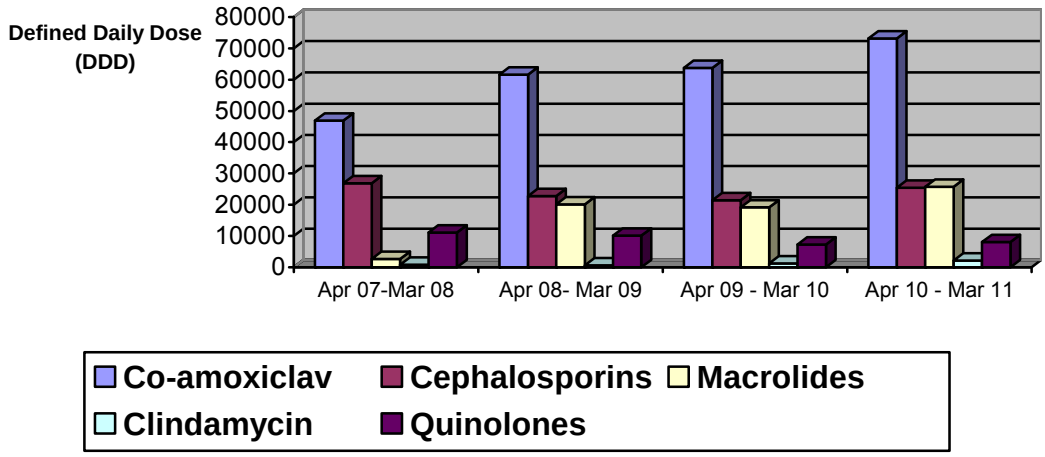
The total antibiotic consumption expressed as defined daily doses (DDDs) and DDDs per 1000 occupied bed days (OBD) in 2010/2011 is shown on the following table. At present, benchmarking data is not available in the NHS in

England, but we hopeful that such data will, in future, be available to allow inter-hospital comparisons. Based on published data, the overall figure of 1210 DDD/1,000 OBD seems typical of an acute general hospital.

	DDDs	**DDD/1000 OBD**
MED	150460	1209
SURG	74331	1330
WACH	32741	1006
Trust	**257532**	**1210**

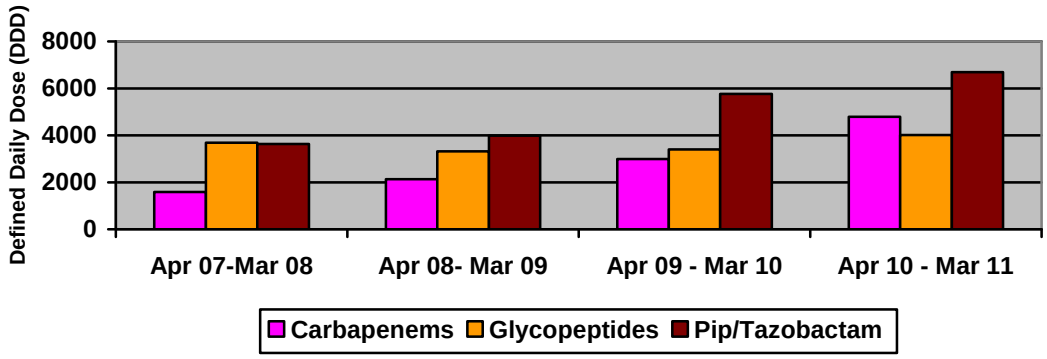
The antibiotic stewardship team also maintains surveillance of "*C.difficile* associated antimicrobials". This data is also included in data fed back to directorates on a quarterly basis. Whilst some rises are seen in these in recent years, it should be noted that this reflects rising patient numbers (increased OBD), and also increased use as part of efforts to optimise treatment of community acquired pneumonia.

Figure 1: SASH Antibiotic Consumption for *C.dfficile* associated antimicrobials



A rising trend of consumption is also noted for two restricted antibiotics – these are antibiotics, generally broad spectrum and of higher cost, which are subject to restriction procedures as per the trust policy. Rises in use of piperacillin / tazobactam and meropenem are being seen nationally, and this is due to a. changes in prescribing patterns to reduce selective pressure for *C.difficile*, and b. a rapidly rising level of multiresistant gram negative bacilli, usually *E.coli* with extended spectrum beta-lactmases (ESBLs).

Figure 2: SASH Consumption data for Restricted Antimicrobials



5.6) Education and Training

The Antibiotic Stewardship Team participated in the European Antibiotic Awareness Day 2010 on November 18th 2010. Information on antibiotics prescribing and resistance was displayed around the hospital to raise healthcare professionals and public awareness on prudent use of antibiotics. An active promotion was held outside the staff canteen during lunch hours where games and quizzes were held and Consultant Microbiologists were present for questions and answers.

Formal training sessions were delivered by Antibiotic Stewardship Team:

- Antibiotic stewardship: rolling half day (Feb 2011)
- To Junior doctors FY1,FY2 (August, Sep & Dec 2010)
- SPR and staff grade induction (Oct 2010)
- In-house training for ward pharmacists (ongoing)
- Antibiotic therapeutic drug monitoring drop in sessions for nurses and doctors (June 2010)

6) Estates and Environmental Issues

6.1) Designation of a Decontamination Lead

The Trust has a senior manager for its Decontamination Lead, who is the manager for sterile services and who is a member of the IPCAS Group. A separate Decontamination Steering Group exists, which is chaired by the Decontamination Lead under its own Terms of Reference and reports to the IPCAS Group.

It is noted that the revised Hygiene Code (with effect from 1st April 2010) has developed the Decontamination Lead role further, to include responsibility for all aspects of decontamination in its widest sense, including:

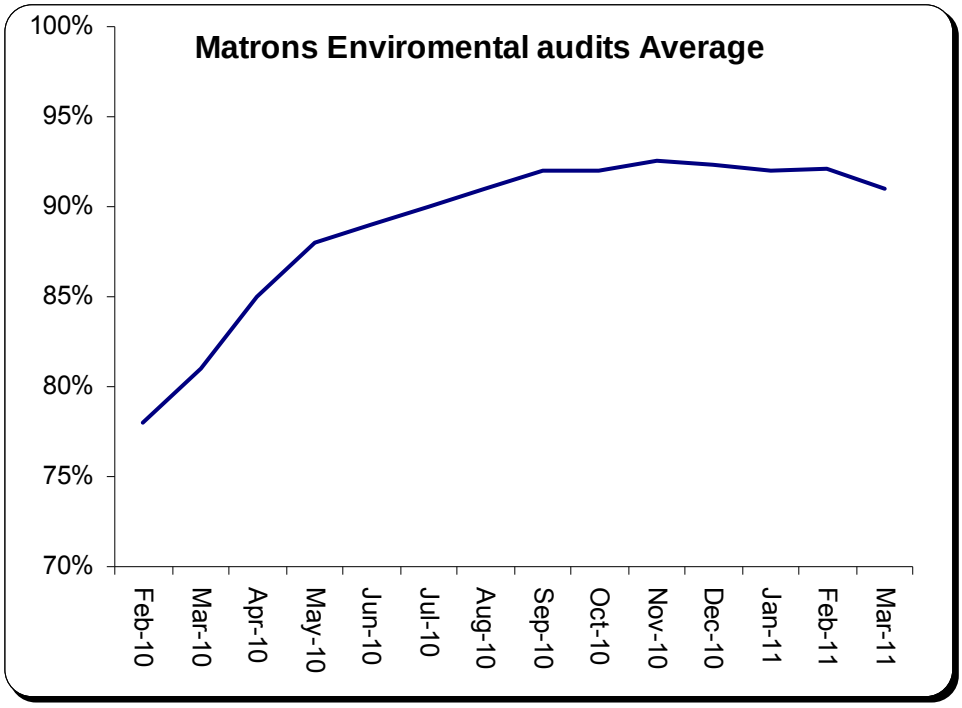
- Cleaning and disinfection of the environment
- Cleaning and disinfection of ward equipment
- Cleaning and disinfection of re-usable clinical equipment
- Cleaning, disinfection and sterilisation of re-usable surgical and interventional devices

This change broadens the remit considerably from what traditionally has been seen as “decontamination” (i.e. so-called sterile services), and which now requires a greater level of accountability within organisations. Objectives incorporated in the IPCAS Annual Programme for 2009/10 reflect the need to meet this development. (Objective met in June 2011)

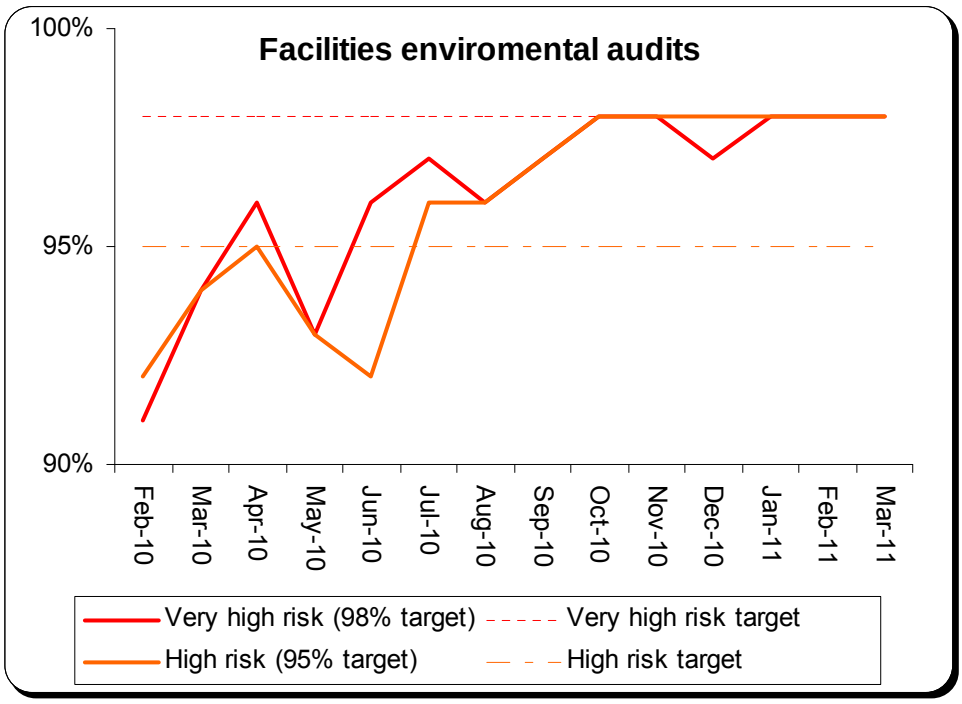
6.2) Environmental cleanliness

The second duty of the code of practice is to provide a Clean and Appropriate Environment. As such the Matrons are responsible for carrying out monthly audits of each clinical area using a tool which looks at environmental cleaning and other aspects of infection control. This tool is based on tools generated by the infection control society.

Average compliance with the Matrons audit rose sharply at the start of the financial year following the CQC inspection in February. This was due to significant expenditure replacing damaged equipment, repairing clinical environments and in increasing the in house cleaning establishment. During this period there was also increased monitoring and focus on individual responsibilities at ward level. Average compliance is detailed below:



This was reviewed in conjunction with the Facilities lead audit which is based on a nationally agreed tool. The Infection Control Task Force focuses on Very high risk and High risk areas. In these areas there was a similar improvement in compliance scores.



However there is still a need to focus on very high risk areas as despite the average compliance meeting the standard there are still areas that score less than 98%.

The IPCAS Team continues to collaborate with the Estates and Facilities managers to prevent and control HCAI through high environmental standards. The Head of Estates and Head of Facilities sit on the HCAI Taskforce and IPCAS Group. A member of the IPCAS Team is regularly represented on the Patient Environment Action Team (PEAT) inspections. The IPCAS Team are also involved in major refurbishment or redesign of clinical areas.

6.3) Capital projects

The IPCAS team act as advisors on any Capital Projects taking place at SASH to give infection prevention and control advice where appropriate. Throughout 2010/2011, the IPCAS team sat on project groups for SAU, Endoscopy, ED and Theatres refurbishment.

Increased provision for source isolation

The project established to increase the provision of side rooms has now been absorbed into the business case for 'Unscheduled Care.' The IPCAS team are working with the 'Unscheduled care user group' to address the issue of isolation facilities and advise on any infection control matters involved in the projects.

6.4) Clinical hand wash sinks

Following an inspection of Surrey & Sussex Healthcare NHS Trust by the CQC in January 2010, an audit of the hand hygiene sinks was commissioned by the HCAI Taskforce. Funding was identified and work has been carried out in some of the areas identified in the report. A capital bid of £10k has been submitted to complete this work in 2011/12.

7) Decontamination

7.1) Nasoendoscopes

An audit of the decontamination process was carried out in April 2010 and the results are as follows.

Department	Percentage compliance score
ENT clinic Crawley Hospital OPD	• 70%
ENT clinic Caterham Dene Hospital OPD	• 70%
ENT clinic Horsham Hospital OPD	• 70%
ENT clinic East Surrey Hospital OPD	• 80%
Surgical Assessment Unit, ESH	• Reported as currently not in use

All naso-endoscopes are now from one supplier to ensure compatibility both in use and training. The audit above has been shared with the relevant departments and they are addressing the issues identified. A new protocol was established for the SAU scope that can be used in many locations and is a temporary solution until sufficient nasoendoscopes can be purchased via the capital bid process. Nasoendoscopes are the one area of decontamination of re-usable medical devices that hasn't been addressed therefore a capital bid has been submitted for 2011/12 for the purchase of sufficient quantity to enable centralization of all nasoendoscopes. The current practice of decontamination of nasoendoscopes will be audited as part of the Decontamination audit programme 2011/2012.

7.2) Endoscopy

The new unit has been operational since September 2010. There have been significant plant issues that have now been addressed. However this did cause some patients to be cancelled. These are now minimal and actions are in place to ensure that all equipment works as expected. There have been a few poor final rinse water results but these are being managed with operational procedures and are considerably less than many other Trust experience.

7.3) Dental

All SaSH dental instrumentation reprocessing has been centralized to be processed in the HSDU. SaSH dental staff provide a service under contract to Surrey PCT to provide a service on three community dental clinics – Merstham, Dorking and Caterham Dene. Audits were carried against HTM 01- 05 and as a result the service was moved to Caterham Dene and into East Surrey Dental Unit. A re-audit of the Caterham Dene facility was completed in March 2011, and was compliant with the 'the "essential requirements" of HTM 01-05 Decontamination of dental instrumentation in Primary Care." Annual audits will continue.

8) Service Development

8.1) Intravenous specialist Nurse

During 2010/2011 the job description of the Practice Development Nurse for Infection Prevention and Control was been changed to IV Specialist Nurse. This is to support the care and management of Peripherally Inserted Central Catheters (PICCs) for patients requiring long-term antibiotic therapy. Early line placement reduces the number of patient bed days, relieves pressure on available patient beds and reduces the risk of a patient acquiring a healthcare associated infection. A PICC or Midline also reduces the number of missed antibiotic doses resulting from unreliable intravenous access that could result in treatment delays. Jill has also been trained to insert PICC/Midlines using the Micro-introducer Technique which enables ultrasound (USS) guided upper arm PICC placement. This is an important service development for the Trust, as Jill now works with the microbiologists and the District Nursing teams to facilitate timely intravascular access and early discharge. The patient experience is also improved.

8.2) Catheter-associated urinary tract infection (CAUTI)

The IPCAS team carried out a Point Prevalence Study of catheter-associated UTI in November 2010. The aim of the study was to ascertain the rate of CAUTI in Surrey & Sussex NHS Trust using uniform data definitions, and to maximise the potential for reduction of HCAI through surveillance activities. No catheter related UTIs were identified, although this was based on only 35 catheters. The national rate is 7%. Issues identified included poor recording of clinical indication and insertion date. The Trust is currently trialling a urinary catheter care plan, and insertion and care of urinary catheters is now included in the 'Train the Trainers' programme for aseptic technique in clinical areas.
Following the Point Prevalence study, a 'Strategy to prevent Catheter-associated Urinary tract Infections' has been developed with the following aims:

1. Carry out surveillance of CAUTIs in SASH
2. Proposal for surveillance nurse
3. Implement a structured system for identifying essential catheter insertions
4. Identify rate of urinary catheter use at SASH.
5. Reduce the number indwelling urinary catheters

8.3) Surveillance

Surveillance of "alert" organisms and health-care associated infections (HCAIs) is a core function of the IPCAS Team. It enables the detection of changes in the incidence and prevalence of key infections. These function as key performance indicators and act as a means of assurance as to the general quality of infection prevention-control and antibiotic stewardship practices, while also acting as the trigger for detecting outbreaks of infection. The IPCAS team review alert organisms at team meetings, and disseminate the data by ward and division to Divisional Leads, IPCAS Group and Performance managers.

8.4) Risk Factors associated with *Clostridium difficile*

There have been two changes associated with surveillance this year; the first being the addition of risk factors to the CDI database. This includes risk factors for disease acquisition and for severity of disease. The following risk factors are recorded in the CDI database (for in-patients):

- Age > 65 years
- Number of antibiotics in the last 28 days
- Whether antibiotics were appropriate
- Current PPI
- Chemotherapy within 28 days or current neutropenia
- Duration of stay
- Inflammatory bowel disease
- Nursed in proximity to CDI positive patient within 28 days
- Current PEG feed
- Gastrointestinal surgery in last 28 days
- HIV positive
- Severe Underlying illness

This data will be analysed on a quarterly basis and presented to the IPCAS Group and HCAI Taskforce.

8.5) ESBL database

The second development in surveillance is the development of an ESBL database. Extended-Spectrum Beta-Lactamases (ESBLs) are enzymes that can be produced by bacteria making them resistant to cephalosporins e.g. cefuroxime, cefotaxime and ceftazidime - which are the most widely used antibiotics in many hospitals. ESBLs were first described in the mid-1980s and during the 1990s were mostly found in *Klebsiella* species, mostly in hospitals and often in intensive care units treating the most vulnerable patients. The IPCAS team monitor trends in the numbers of isolates which are positive for ESBL, enabling the detection of changes in the incidence and prevalence of these organisms.

8.6) Infection Control Week

Infection Control Week took place 18th-22nd October 2010, with the following activities:

- Information boards – rotating around 5 areas throughout the week
- Dedicated edition of SASH window
- Corridor display commencing with global hand washing day 15th Oct
- Tray mats with info for restaurant
- Tray mats with IC related info / activities for paediatrics
- Colouring competition (paeds)
- Famous hands statue competition
- MRSA screening competition
- IC study day
- Communications support – with radio Redhill infomercial and support

- Countdown to infection control week on the e-bulletin

The Infection Prevention and Control Study Day was a joint partnership venture this year, run in conjunction with infection control colleagues from West Sussex PCT and Surrey PCT. The day was well attended and evaluated by both acute and community colleagues. Topics included ESBLs, aseptic technique, Legionella, urinary catheter care, wound care and intravenous line care.

9) Infection Prevention & Control Champions

The Infection prevention & Control Champions continue to support the Trust's drive to deliver safe high quality care by their involvement in the process of the prevention & control of infections. Within their clinical areas they are responsible for; being a role model for and raising awareness of infection prevention and control practice and policy, acting as a resource and liaison, and monitoring compliance with key practices through audits (e.g. ANTT, hand hygiene, *Saving Lives*).

Following a decision for Health care Assistants to work alongside the Champions in supporting the Infection Prevention & Control agenda the year commenced with a study day on 15th April 2010. This was specifically aimed at engaging the HCA champions in their new role by embedding basic Infection Prevention & Control practice through theory and practical sessions. 35 were in attendance.

Champion meetings have convened quarterly with the agenda incorporating an educational focus in addition to updates on IPC issues e.g. HCAI rates, lessons learnt from RCA, audits, policies and protocols. Agendas are available from the IPCAS team.

2010/11 Dates	***speaker***	***topic***
15th April	Champion Launch – programme available from IPCAS team	Programme available from IPCAS team
7th June	Jill Clarke (Intravenous Nurse Specialist)	Cannulation Policy
19th August	Dorothy Chakani (Senior Infection Prevention & Control Nurse – West Sussex PCT)	Infection Control and Communication across healthcare providers
14th October	Chris Nash (Senior Biomedical Scientist – Microbiology)	Specimens
15th December	Ruth Bradburn (Senior Infection Prevention & Control Nurse)	Norovirus

Numbers in attendance have been on average 15-22 with representation across a variety of clinical areas. This includes a representative from Central Surrey Health, St Catherine's Hospice and the National Young Peoples Centre Epilepsy as part of a Service Level Agreement.

In 2011/12 the aim is to continue to support and develop the champions in modelling the way and raising the profile of the IPC agenda within their clinical areas through ongoing liaison & education of key infection prevention & control issues.

10) Training

Training continues to be a high focus for the IPCAS team. As well as being involved in the main trust statutory and mandatory training routines the team delivers adhoc training to specific staff groups, SLASH training for Junior Doctors (Saving Lives – Aseptic Skills for Healthcare) and specific training in areas following incident investigation (The main training formats are detailed late in the section). The percentage of staff receiving training (detailed below) continues to be a focus of concern. During 2010/11 the team worked in conjunction with the corporate training department to investigate ways of delivering more training each year.

Staff Group	Number of staff	Total trained	Percentage
Nursing and Midwifery Registered	1071	637	59.5%
Administrative and Clerical	685	187	27.3%
Additional Clinical Services	555	336	60.5%
Estates and Ancillary	299	69	23.1%
Healthcare Scientists	128	42	32.8%
Allied Health Professionals	122	57	46.7%
Add Prof Scientific and Technical	26	18	69.2%
	2886	1346	46.6%

In terms of the main 3 courses delivered the numbers of attendances are as follows:

Course Title	
Infection Control Update (ESU)	798
Infection Control for Clinical New Starters	180
Infection Prevention and Control for Non-Clinical Staff	386

10.1) Trust Welcome Day

The IPCAS Team continued to support the Welcome Day in during 2010/11 which encompassed the following:

- Introduction to the IPCAS Team and its role in IPC
- Background on HCAI
- The Code of Practice for the Prevention & Control of Healthcare-Associated Infections
- Standard infection prevention and control precautions
- Hand hygiene

10.2) Trust Statutory Training

In 2010/11, infection prevention and control training focused on the following elements:

- The Code of Practice for the Prevention & Control of Healthcare-Associated Infections
- Prevention & management of *Clostridium difficile* Infection (CDI)
- Hand hygiene
- MRSA
- Saving Lives – Aseptic Skills for Healthcare (SLASH)
- Commode cleaning (since March 2010)
- Checking mattresses (since March 2010)
- Use of Actichlor

10.3) Non-Clinical Statutory Training

Statutory/mandatory training for non-clinical staff includes:

- Background on HCAI and update on HCAI targets
- The Code of Practice for the Prevention & Control of Healthcare-Associated Infections
- SaSH developments and progress with infection prevention & control
- Hand hygiene

10.4) Midwifery Statutory and mandatory course

The topics covered were:

- The Code of Practice for the Prevention & Control of Healthcare-Associated Infections
- MRSA
- Use of Actichlor
- Hand hygiene
- SLASH

10.5) Facilities

Training focusing on the basic principles of infection prevention and control, standard precautions, cleanliness and hand hygiene has been delivered across the spectrum of disciplines within Facilities to housekeeping, domestic, portering, catering, EME & Estates staff. Sessions have been altered to meet the specific learning needs of the group. Delivery of training sessions has been supported by the deputy housekeeping manager.

10.6) Volunteers

SaSH volunteers have received infection prevention and control training during the year. The IPCAS Team continues to have a good working relationship with the voluntary services manager to ensure volunteers remain informed of relevant issues.

Section B

IPCAS ANNUAL PROGRAMME

1) Summary of progress against IPCAS Programme objectives for 2010/11

Programme Objectives

The Infection Control Annual Programme for 2010/11 laid out 61 specific objectives under the 10 standing duties of the Code of Practice. Of these 50 were fully completed in-year, 6 were commenced and 5 were carried forward to 2011/12. The Programme Objectives for 2010/11 are summarised below.

As a result of completion of tasks, audits etc a further 11 actions were added to the programme. These in general looked to improve assurance or compliance following an audit or policy review.

At the time of writing this Annual Report an Executive lead for Decontamination had been named, leaving 10 objectives as on-going and incorporated into the Annual Programme for 2011/12. These partially-completed objectives are:

- Map key policies, reports and audits onto the new Trust governance system CIRIS
- Review environmental decontamination policies and assurance framework
- Develop system for recording competence for decontaminating reusable devices at frontline level
- Review all patient information leaflets, update Hand hygiene leaflet
- Monitor compliance with Trust PDR system in particular the IPC section.
- Antibiotic Strategy; Review authorisation system for restricted antibiotics and Develop monthly critical incident monitoring and reporting

Programme Objectives for 2011/12 are detailed later in the document. These are aligned to the updated version of the Code of Practice.

ID No.	Objective/standard	Actions outstanding	Review / Target date	Lead
Criterion 1: Systems to manage and monitor the prevention and control of infection. These systems use risk assessments and consider how susceptible service users are and any risks that their environment and other users may pose to them.				
	The mechanisms by which the Board intends to ensure that adequate resources are available to secure the effective prevention and control of HCAI	Review assurance framework for compliance with code of practice. To include consideration of registration with CQC. To be included in CIRIS implementation due 31/10/10 Populate CIRIS with evidence and review reporting arrangements	31/08/10 Initial mapping complete 28/02/10 Ongoing	DIPC/IPCAS Team IPCAS Program Manager
	The mechanisms by which the Board intends to ensure that adequate resources are available to secure the effective prevention and control of HCAI	Ensure Infection Control remains a regular standing report to the Board by reviewing board agendas	31/12/10 Completed	DIPC
	A programme of audit to ensure that key policies and practices are being implemented appropriately	Environmental and decontamination policies to be reviewed to ensure they meet requirements of code of practice	31/12/10 Commenced to be reviewed at Decontamination group	Lead ICN/Decontamination Lead/ Head of Facilities
	A programme of audit to ensure that key policies and practices are being implemented appropriately	Review surveillance and audit programme to compare against national requirements and best practice audits	31/10/10 Completed	Lead ICN
	A programme of audit to ensure that key policies and practices are being implemented appropriately	Review Directorate reporting to IPCAS Group and reporting to Directorate Governance Committees to ensure relevant information and audit data is being shared	31/12/10 Completed	IPCAS Programme Manager

ID No.	Objective/standard	Actions outstanding	Review / Target date	Lead
	Board level agreement outlining its collective responsibility for minimising the risks of infection and the general means by which it prevents and controls such risks	Formalisation of an IPCAS strategy which endorses a whole systems approach within the local health economy and sets out the necessary assurance framework and monitoring systems	30/06/10 Completed	Lead ICN
	Ensure staff involved in the delivery of healthcare have appropriate training	Attendance at IPCAS training to be incorporated as a KPI in the scorecard system. This will be monitored by the HCAI Task Force	31/05/10 Complete	IPCAS Programme Manager
	A provider has made suitable and sufficient assessment of the risks to patient of receiving healthcare with respect to HCAI	Review risk register and ensure aligned with Board Assurance Framework.	31/05/10 Completed	IPCAS Programme Manager
	A provider has made suitable and sufficient assessment of the risks to patient of receiving healthcare with respect to HCAI	Review IPC risk assessments	31/12/10 Complete	IPCAS Programme Manager
	A provider has made suitable and sufficient assessment of the risks to patient of receiving healthcare with respect to HCAI	Review process for investigating and declaring HCAI related SUI.	31/10/10 Complete	Lead ICN
	1/4ly reporting to the Board by Clinical Directors and matrons	Review board reports from Matrons and Clinical Directors to ensure they include relevant information To be reviewed in light of changes of to code of practice in effect from 2011/12	31/10/10 Completed	DIPC/ Medical Director

ID No.	Objective/standard	Actions outstanding	Review / Target date	Lead
Criterion 2: Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections.				
	All parts of the premises in which it provides health care are suitable for the purpose kept clean and maintained in good physical repair and condition	Decontamination Group and Taskforce to review audit processes for decontamination of reusable medical devices, equipment and the environment	30/06/10 Commenced Decontamination group to meet in March	Decontamination Lead
	Staff are trained in decontamination processes and hold appropriate competencies for their role	Review training for decontamination of medical equipment and the environment (Non HSDU)	31/07/10 Completed	Lead ICN/Head of Facilities
	Staff are trained in decontamination processes and hold appropriate competencies for their role	Develop a system for local monitoring and recording of competence to decontaminate medical equipment and environment. (Non HSDU)	28/02/11 Commenced	Lead ICN/Head of Facilities/HoNAGs
	All parts of the premises in which it provides health care are suitable for the purpose kept clean and maintained in good physical repair and condition	Using feedback from Matrons and Facilities environmental audits to monitor concerns with condition of clinical areas are addressed. Report findings to IPCAS Group	31/08/10 Complete	IPCAS Programme Manager
	All parts of the premises in which it provides health care are suitable for the purpose kept clean and maintained in good physical repair and condition	Receive update report on progress of planned preventative maintenance programme for 2010/11. Focusing on internal environmental and sanitary issues in clinical areas. To include a report on urgent non planned activity detailing priority and waiting time.	31/10/10 Complete	Head of Estates
	All parts of the premises in which it provides health care are suitable for the purpose kept clean and maintained in good physical repair and condition	Review implementation of handheld monitoring tool and change from 2004 to 2007 environmental cleaning standards	31/10/10 Complete	Head of Facilities

ID No.	Objective/standard	Actions outstanding	Review / Target date	Lead
	There is adequate provision of suitable hand washing facilities and antibacterial hand rubs.	Monitor actions following sink audit carried out February 2010. Initial refurbishment to be coordinated with side room project. Remaining issues to be resolved.	30/06/10 Ongoing	IPCAS Group
	There are effective arrangements for the appropriate decontamination of instruments and other equipment - these should be incorporated within appropriate disinfection and decontamination policies	Audit implementation of new Medical Devices Policy in place end of 09/10 regarding decontamination and purchasing decisions	31/10/10 Commenced	Medical devices group
	The development of local policies should take account of infection control advice given by relevant expert or advisory bodies with regards to Building and refurbishment including air handling systems	Produce a report on the maintenance of air handling systems detailing compliance with national guidelines	31/10/10 Complete	Head of Estates
	The development of local policies should take account of infection control advice given by relevant expert or advisory bodies with regards to Building and refurbishment including air handling systems	Produce biannual report listing planned and existing refurbishment and new builds to ensure the IPCAS Team are aware and involved if relevant	31/10/10 Complete	Head of Estates
	Minimising the risk of Legionella by adhering to national guidance	Seek assurance that Trust Achieves compliance with national guidance on Legionella management	31/10/10 Complete	Head of Estates
	Suggested overarching decontamination lead responsible for monitoring decontamination of reusable devices, nursing equipment and the environment.	Review assurance framework processes for decontamination to include one Executive Lead and reporting of committees	30/06/10 Outstanding (Now complete)	DIPC/ Exec Team

ID No.	Objective/standard	Actions outstanding	Review / Target date	Lead
Criterion 3: Provide suitable accurate information on infections to service users and their visitors.				
	Provide suitable and sufficient information on HCAI to the patient	Public notice boards displaying relevant information to be introduced in all clinical areas. Review of information displayed to be carried out	31/12/10 Complete 2011/12 To be carried forward	HCAI Task Force
	Provide suitable and sufficient information on HCAI to the patient	Ensure regular attendance at the Trust patient's Council meeting. Following review attendance to be re-established	31/12/10 Review complete 31/03/10 Complete	IPCAS Program Manager
	Provide suitable and sufficient information on HCAI to the patient	Review all patient information leaflets, update Hand hygiene leaflet	31/12/10 Underway	Lead ICN
Criterion 4: Provide suitable accurate information on infections to any person concerned with providing further support or nursing/medical care in a timely fashion.				
	A policy on information sharing when admitting, transferring, discharging and moving service users within and between health and social care facilities is available	Audit of IHC transfer form and action any concerns Audit of "All purpose transfer form"	30/07/10 Complete 28/02/2011 Complete	IPCAS Team
	A policy on information sharing when admitting, transferring, discharging and moving service users within and between	Audit of infection prevention and control information shared during internal movement of patients	31/12/10	Matrons, HCAI Taskforce

ID No.	Objective/standard	Actions outstanding	Review / Target date	Lead
	health and social care facilities is available	Initial review complete following new system, follow up audit required	2011/12 To be carried forward	
Criterion 5: Ensure that people who have or develop an infection are identified promptly and receive the appropriate treatment and care to reduce the risk of passing on the infection to other people.				
	Ensure continuing joint working between the infection control team, bed managers and domestic services in planning patient admissions, transfers and movements between departments and other healthcare facilities	Carry out review of policies, procedures and implementation of the management of the movement of infectious patients within the Trust Initial review complete following new system, follow up audit required	31/10/10 2011/12 To be carried forward	HCAI Taskforce
	Ensure that patients who present with MRSA colonisation are identified and managed appropriately.	Monitor compliance with emergency screening. National target all relevant emergency admissions by 31/12/10	31/08/10 Ongoing	HCAI Taskforce
	Ensure that patients who present with MRSA colonisation are identified and managed appropriately.	Monitor compliance with decolonisation protocol Repeat audit	30/06/10 Complete 31/03/11 Commenced	IPCAS Programme Manager
	Ensure continuing joint working between the infection control team, bed managers and domestic services in planning patient admissions, transfers and movements between departments and other healthcare facilities	Monitor update of Cerner Millennium. In particular the use of warning flags and nursing assessments	31/08/10 Complete	IPCAS Programme Manager

ID No.	Objective/standard	Actions outstanding	Review / Target date	Lead
Criterion 6: Ensure that all staff and those employed to provide care in all settings are fully involved in the process of preventing and controlling infection.				
	The responsibilities of a member of staff for prevention and control of infection are reflected in their PDP or appraisal.	Trust PDR recovery plan is in place and includes infection control. Monitor compliance with recovery plan ongoing.	30/07/10 Complete	Workforce Development/ IPCAS Programme Manager
	The responsibilities of a member of staff for prevention and control of infection are reflected in their PDP or appraisal.	Monitor compliance with Trust PDR system in particular the IPC section.	31/03/11	Workforce Development/ IPCAS Programme Manager
	Trust should ensure that its staff, contractors and others involved in the provision of healthcare co-operate with it and with each other so far as is necessary to enable the body to meet its obligations in relation to prevention and control of HCAI.	Compliance with statutory and mandatory training needs to be monitored. Indicators to be in place from April 10	Complete	IPCAS Group/Taskforce
	Ensure that all staff and those employed to provide care in all settings are fully involved in the process of preventing and controlling infection.	Review medical attendance at IPCAS Group. IPCAS Group TOR of reference to be reviewed following changes to organisational structure	31/12/10 Complete 2011/12 To be carried forward	DIPC/ Medical Director
Criterion 7: Provide or secure adequate isolation facilities.				
	A provider of inpatient care should ensure that it is able to provide or secure the provision of adequate isolation precautions and facilities as appropriate for patients, sufficient to prevent and minimise the spread of HCAI.	Receive written update of progress on commitment to increase the availability of side rooms at East Surrey Hospital.	31/10/10 Complete	Head of Estates

ID No.	Objective/standard	Actions outstanding	Review / Target date	Lead
	A provider of inpatient care should ensure that it is able to provide or secure the provision of adequate isolation precautions and facilities as appropriate for patients, sufficient to prevent and minimise the spread of HCAI.	Carry out isolation audit and feedback to IPCAS Group and HCAI Taskforce Re audit as above	31/05/10 Complete 28/02/11	Lead ICN
Criterion 8: Secure adequate access to laboratory support as appropriate.				
	A provider should ensure that labs used to provide a microbiology service in connection with arrangements for IPC have in place appropriate protocols and that they operate according to the standards from time to time required for accreditation by Clinical Pathology Accreditation (UK)	Seek assurance from laboratory service that Clinical Accreditation is in place and all policies and procedures are in date and implemented.	31/08/10 Complete	IPCAS Team
Criterion 9: Have and adhere to policies, designed for the individual's care and provider organisations, that will help to prevent and control infections.				
	Policies should be based on evidence-based guidelines and should be easily accessible to staff. Compliance with the policies should be audited. Information on policies should be included in infection control programmes for all relevant staff groups.	Mid term review of Infection Control Manual to ensure policies still based on best practice	31/03/11 Review complete Minor changes to be carried forward	IPCAS Team
	Policies should be based on evidence-based guidelines and should be easily accessible to staff. Compliance with the policies should be audited. Information on policies should be included in infection	Develop IPCAS Group audit and assurance program based on Gap analysis to improve assurance of weaknesses with the hygiene code.	31/10/10 Complete	IPCAS Group

ID No.	Objective/standard	Actions outstanding	Review / Target date	Lead
	control programmes for all relevant staff groups.			
	Ensure the Trust has policies covering a range of specific alert organisms based on patient risk assessment and implementation of transmission-based precautions.	Ratify Viral Haemorrhagic Fevers (VHF) policy.	30/07/10 Complete	DIPC/IPCAS Programme Manager
	Re-usable medical devices should be decontaminated in accordance with manufacturers' instructions and current guidelines.	Complete audit of decontamination of nasal endoscopes and monitor any actions required to completion	30/07/10 Complete Re audit 31/03/10	Decontamination Group
	Precautions in connection with handling healthcare waste include; training and information, and safe systems for the appropriate treatment and disposal of such waste.	Report for compliance with waste management policies and procedures	31/11/10 Complete	Head of Facilities
	Policies should be based on evidence-based guidelines and should be easily accessible to staff. Compliance with the policies should be audited. Information on policies should be included in infection control programmes for all relevant staff groups.	Review IPC manual and implementation to ensure relevant polices are being embedded to meet requirements of NHSLA	31/12/10 Complete	IPCAS Programme Manager
Criterion 10: Ensure, so far as is reasonably practicable, that care workers are free of and are protected from exposure to infections that can be caught at work and that all staff are suitably educated in the prevention and control of infection associated with the provision of health and social care.				
	Policies for immunisation of healthcare workers are to be in place.	Policies to be in place by 31/05/10	30/06/10 Complete	Occupational Health / IPCAS Programme Manager

ID No.	Objective/standard	Actions outstanding	Review / Target date	Lead
	Arrangements for identifying and managing healthcare workers infected with Hepatitis B, HIV or Hepatitis C and restricting their practice as necessary in line with DH guidance.	Policies to be in place by 31/05/10	30/06/10 Complete	Occupational Health / IPCAS Programme Manager
	Liaison with UK Advisory Panel for management of healthcare workers with blood-borne viruses.	Policies now in draft to be in place by 31/05/10	30/06/10 Complete	Occupational Health / IPCAS Programme Manager
	There is a programme of ongoing education for existing staff (including support, agency, locum and contractors)	Monitor KPI for staff training to include Bank Staff	Ongoing Review complete KPI to be identified	IPCAS Programme Manager
Prudent Antimicrobial Prescribing Strategy Actions				
	Develop Antibiotic Stewardship Team to meet needs of the Trust	Ensure the availability of an information technology specialist/pharmacy technician to provide data support to Antimicrobial pharmacist	Dec 2010 Not viable due to budget restrictions reviewing IT alternative	Chief Pharmacist
	Maintain and review the antimicrobial formulary	Review authorisation system for restricted antibiotics	Dec 2010 Partially completed	Antibiotic Stewardship Team
		Consider additional Formulary D&T applications for new antimicrobials (i.e. Pivmicillinam)	Complete	
	Feedback of antimicrobial resistance data to prescribers	Develop system for regular feedback of resistance data to directorates	Dec 2010 Complete	Antibiotic Stewardship Team

ID No.	Objective/standard	Actions outstanding	Review / Target date	Lead
	Feedback of prescribing practice compared to recommended practice contained in the formulary to prescribers	Monthly/Quarterly report of DDD consumption data for directorates – need to address limitations by pharmacy IT system and obtain technician/data analyst support	June 2010 Complete First reports complete Med and Sur	Antibiotic Stewardship Team/ IPCAS Programme Manager
	Audit current practices in antimicrobial prescribing against the standards set out in local trust policies and the formulary	Undertake specific antibiotic audits e.g. restricted list antimicrobials audit and Vancomycin audit	Mar 2011 Carried forward to 2011/12	Antibiotic Stewardship Team
		Develop monthly critical incident monitoring and reporting Note: Formal feedback to IPCAS Group and Directorates to be developed	Dec 2010 Partially complete	
	Provide education and training to healthcare professionals in the use of antimicrobials	Produce A4 Summary antibiotic policy to be distributed to wards	July 2010 Complete	Antibiotic Stewardship Team
	Provide education to patients receiving antimicrobials and the public	Review discharge medication process as part of Length of Stay project	Dec 2010 Complete	Clinical Operational Group/ Antibiotic Stewardship Team
	Antibiotic stewardship and clinical directorates	Ensure regular reporting of standardised data relating to antibiotic use to clinical directorates Ensure that antibiotic stewardship issues are regularly discussed by directorate clinical governance committees	June 2010 First report complete Mar 2011	IPCAS Group IPCAS Group

ID No.	Objective/standard	Actions outstanding	Review / Target date	Lead
		Extend the “link physician” roles to include antibiotic stewardship	Mar 2011 To be carried forward	IPCAS Group

Surrey and Sussex NHS Healthcare NHS Trust

Infection Prevention Control and Antibiotic Stewardship (IPCAS):

Annual Programme for 2011/12

April 2011

Dr Des Holden, Chief Medical Officer and DIPC*

Trust IPCAS Leads: Dr Karen Knox, Consultant Medical Microbiologist and Trust Infection Control Doctor
Ashley Flores, Lead Nurse in IPC and Deputy DIPC
Dr Donald Lyon, Consultant Medical Microbiologist and Lead for Antibiotics

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Putting people first
Delivering excellent, accessible healthcare

Summary

Each year the IPCAS team prepares an annual programme of work which is included in the Annual Report and monitored by the IPCAS Group. The main purpose of this programme of work is to ensure that a culture of continual improvement is maintained and to try and reduce infection risks that patients, staff and visitors are exposed to a minimum. As with previous years the IPCAS programme is based on the Trust's compliance with the "Code of Practice on the prevention and control of infections and related guidance". Each year the Code of Practice is reviewed to ensure that any key changes have been addressed.

This year the programme will be broken down into three sections;

- Gaps and Concerns
- Audit and Surveillance
- Service improvement

To maintain links to compliance with the Code of Practice each action will be linked to the most relevant criterion of the Code of Practice.

Criterion	What the registered provider will need to demonstrate
1	Systems to manage and monitor the prevention and control of infection. These systems use risk assessments and consider how susceptible service users are and any risks that their environment and other users may pose to them.
2	Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections.
3	Provide suitable accurate information on infections to service users and their visitors.
4	Provide suitable accurate information on infections to any person concerned with providing further support or nursing/ medical care in a timely fashion.
5	Ensure that people who have or develop an infection are identified promptly and receive the appropriate treatment and care to reduce the risk of passing on the infection to other people.
6	Ensure that all staff and those employed to provide care in all settings are fully involved in the process of preventing and controlling infection.
7	Provide or secure adequate isolation facilities.
8	Secure adequate access to laboratory support as appropriate.
9	Have and adhere to policies, designed for the individual's care and provider organisations, that will help to prevent and control infections.

10	Ensure, so far as is reasonably practicable, that care workers are free of and are protected from exposure to infections that can be caught at work and that all staff are suitably educated in the prevention and control of infection associated with the provision of health and social care.

Section 1
Gaps and concerns with compliance with Code of Practice on the prevention and control of infections and related guidance

ID	Outcome/GAP	Action	Owner	Target date	Code of Practice
1.1	A system for sharing relevant infection control information during internal movement of patients needs to be embedded	Develop a system to ensure relevant IPC information is shared during internal movement of patients	Divisional Chief Nurses	31/12/11	4
1.2	The Trust needs to develop a system for monitoring Medical attendance at update or new starter IPCAS related training	Develop a base line with available data and review possible methods for annual review of training	IPCAS Programme Manager	30/09/11	6
1.3	The Trust should be able to evidence local training of decontamination of medical devices and fixtures and fittings	Embed a system for local monitoring and recording of competence to decontaminate medical equipment and environment. (Non HSDU)	Divisional Chief Nurses / Lead Nurse Infection Control	31/08/11	2
1.4	Low uptake and late commencement of flu vaccination during 2010/11 flu season	Prepare plans for 2011/12 flu vaccinations and ensure stocks are ordered in advance.	Head of Occupational Health	31/08/11	10
1.5	Suggested overarching decontamination lead responsible for monitoring decontamination of reusable devices, nursing equipment and the environment.	Review assurance framework processes for decontamination to include one Executive Lead and reporting of committees	Executive with lead for Decontamination	31/03/12	2
1.6	Increased surveillance requirements, both local and national, are having an increasing impact on IPC Nursing Team workload.	Prepare and present a business case for an IPC Surveillance Nurse. To reduce need for qualified IPC Nurses to act as data collectors	Lead Nurse Infection Control	30/09/11	1

Section 2
Audit and surveillance of compliance with Code of Practice on the prevention and control of infections and related guidance

ID	Outcome/GAP	Action	Owner	Target date	Code of Practice
2.1	To ensure regular monitoring of attendance at IPCAS related training (excluding Medical and Dental staff)	Ensure training performance data is embed into Taskforce Meetings	IPCAS Programme Manager	30/06/11	6
2.2	To ensure regular monitoring of compliance with code of practice	Embed evidence into Governance departments “CIRIS” software and review reporting system	IPCAS Programme Manager	31/08/11	1
2.3	All providers should have made suitable and sufficient assessment of the risks to patient of receiving healthcare with respect to HCAI	Review IPCAS related risk assessments	IPCAS Programme Manager	31/12/11	1
2.4	Provide suitable accurate information on infections to service users and their visitors	Review IPCAS public leaflets	Lead Nurse Infection Control	31/08/11	3
2.5	Ensure relevant information is provided during external transfer of patients	Audit use of transfer form during external transfers and report findings to the HCAI Taskforce	Lead Nurse Infection Control	31/05/11	3
2.6	Ensure patients who are MRSA positive when identified are managed appropriately.	Audit use of MRSA decolonisation and report findings to the HCAI Taskforce	Lead Nurse Infection Control	31/05/11	5
2.7	Ensure waste management policies and procedures are embed and being monitored appropriately	Report on compliance with waste management policies and procedures to be presented to IPCAS Group	Head of Logistics	31/12/11	9
2.8	Ensure that single use devices are being used appropriately	Carry out an audit of use of single use devices	Lead Nurse Infection Control / Matrons	31/12/11	9
2.9	Ensure that Divisional reports to	Review Divisional reports to Board	IPCAS	30/09/11	1

	board continue to include the information required		Programme Manager		

Audit and surveillance of compliance with Code of Practice on the prevention and control of infections and related guidance

ID	Outcome/GAP	Action	Owner	Target date	Code of Practice
2.10	To monitor compliance with Antibiotic guidelines	To develop a system of Antibiotic audit base on department of health high impact intervention using a care bundle approach	IPCAS team	30/07/11	9
2.11	To ensure antibiotic audit results are feedback to appropriate clinical teams and governance meetings	To incorporate audit results relevant to division in regular divisional IPCAS reports	IPCAS team	30/07/11	9

Section 3
Service improvement and IPCAS strategy objectives

ID	Outcome/GAP	Action	Owner	Target date	Code of Practice
3.1	No assurance framework that documents that equipment and the environment is suitable for the purpose, kept clean and maintained in good physical	Develop an assurance framework or policy that documents how the trust monitors compliance with Criteria 2 and current level of compliance	Executive with lead for Decontamination	31/03/12	2
3.2	In order to further reduce the risk of urinary tract and blood stream infections. The Trust needs accurate information on the numbers of urinary catheters used. Once established this number should be reduced where possible	Implement the actions and monitoring detailed in the CAUTI Strategy discussed at taskforce	Lead Nurse Infection Control	31/03/12	9
3.3	Medical attendance and engagement at IPCAS Group meetings needs to be increased	Review terms of reference of IPCAS Group and HCAI Taskforce	DIPC	31/08/11	1
3.4	The Trust should endeavour to implement new actions each year to try and reduce the numbers of Clostridium *difficile* linked to inpatient stays	Implement the actions and monitoring detailed in the Clostridium *difficile* evaluation plan developed during 2010/11	Lead Nurse Infection Control / Trust Infection Control Doctor	31/03/12	9
3.5	IPC strategy aims to achieve the ability to demonstrate level 3 compliance with current NHSLA standards	Review the Trust “Structure and Function of Infection Prevention-Control and Antibiotic Stewardship policy to ensure its still fit for purpose”	IPCAS Programme Manager	30/09/11	1
3.6	Increase provision for source isolation by establishing a extra side rooms at the East Surrey Hospital site		DIPC / Lead Nurse Infection Control	31/03/12	7

Service improvement and IPCAS strategy objectives					
ID	**Outcome/GAP**	**Action**	**Owner**	**Target date**	**Code of Practice**
3.7	In line with changes Trust incident investigation there is a need to devolve RCA investigation to clinical teams	Review the process for carrying out and feeding back investigations post 72 hour cases of Clostridium *difficile*	DIPC/ Trust Infection Control Doctor	30/07/12	6
3.8	Ensure the long term infection prevention and control strategy meets the needs of the Trust	Review the IPC strategy to detail what actions have been met, are outstanding a and are still relevant	Lead Nurse Infection Control	31/12/12	1
3.9	Increase engagement of medical staff in Antibiotic Stewardship programme	Review medical attendance at IPCAS group HCAI taskforce.	DIPC	31/08/11	1
3.10	Current Trust's drug chart has an inadequate provision of documentation of clinical indication and stop date/duration for antibiotics – reflected from GAP audit results and comments from medical consultants	Review current drug chart with a view to enhancing documentation of antibiotic indication and duration	Chief pharmacist	31/12/11	9
3.11	Scope exists to improve current levels of antimicrobial prescribing training – Nov 2010 ASAT review	Engage with Trust's developing online induction training programme for Fy1s/Fy2s and other medical grades	IPCAS team	31/08/11	9