Papworth Hospital NHS
NHS Foundation Trust

Director of Infection Prevention & Control

Annual Report 2008/2009

Infection Prevention & Control Committee Submission date:	28 July 2009
Board of Directors Approval date:	25 June 2009

Position at 31 March 2009
WTE = whole time equivalent.

Contents

1. Introduction

All NHS organisations must ensure that they have effective systems in place to control healthcare associated infection. The prevention and control of infection is part of Papworth's overall risk management strategy. Evolving clinical practice presents new challenges in infection prevention and control, which need continuous review.

The Trust puts infection control and basic hygiene at the heart of good management and clinical practice, and is committed to ensuring that appropriate resources are allocated for effective protection of patients, their relatives, staff and visiting members of the public. In this regard, emphasis is given to the prevention of healthcare associated infection, the reduction of antibiotic resistance and the improvement of cleanliness in the hospital.

The issues that the Trust must consider include:

- The number and type of procedures carried out across the Trust and the systems in place to support infection control and decontamination.
- The different activities of staff in relation to the prevention and control of infection.
- The policies relating to infection prevention and control and decontamination.
- The staff education and training programmes.
- The accountability arrangements.
- The infection control advice received by the Trust.
- The microbiological support for the Trust.
- The integration of infection control into all service delivery and development activity.

This report has been written to provide information about infection prevention and control at Papworth Hospital. This information is primarily aimed at patients and their carers, but may also be of interest to members of the public in general.

The report aims to reassure the public that the minimisation and control of infection is given the highest priority by the Trust.

In publishing this report we recognise that patients and the public are increasingly concerned about infection risks. Access to information about this aspect of hospital care is rightly needed in order to make informed decisions and choices about their health care needs.

2. Executive Summary – Overview of Infection Control Activities within the Trust

The Trust has a proactive infection prevention and control team that is very clear on the actions necessary to deliver and maintain patient safety. Equally, it is recognised that infection prevention and control is the responsibility of every member of staff and must remain a high priority for all to ensure the best outcome for patients.

The hospital has signed up to the "Saving Lives" programme developed by the Department of Health to reduce Healthcare Associated Infections (HCAIs), including MRSA. Savings Lives version 2 (based on the Health Act – Code of Practice) went live in 2007. The infection prevention and control programme has been largely based on this for 2007/8 and beyond.

Papworth continues to take part in mandatory surveillance of Vancomycin Resistant *Enterococci* (VRE) and *Clostridium difficile* as well as MRSA. C.difficile and MRSA reporting continues via the national Mandatory Enhanced Surveillance System (MESS) that requires sign off by the Chief Executive on a monthly basis.

Papworth has lower than the England average for MRSA bacteraemias and C. difficile infections.

3. Description of Infection Control Arrangements

3.1 Corporate Responsibility

The Director of Nursing has lead responsibility within the Trust for Infection Prevention and Control and reports to the Chief Executive and the Board of Directors. Following publication, by the Department of Health in December 2003, of the Chief Medical Officer's strategy for infection control (*Winning Ways: working together to reduce healthcare associated infection*) the Director of Nursing post has been designated as Director for Infection Prevention and Control for the Trust.

The Medical Director and the Head of Clinical Governance and Risk Management, through their respective roles, also exert their influence at a corporate level in areas that have direct impact on infection prevention and control.

3.2 Infection Prevention & Control Team

Specialist advice is provided to clinicians throughout the hospital by the infection prevention and control team. Dr Kappeler (Consultant Microbiologist) is the designated Infection Prevention and Control Doctor (IPCD) with Dr Gillham, Locum Consultant Microbiologist, providing an additional 2 programmed activities of infection control doctor time. When needed, cover for leave of absence is provided by Dr Karas, IPCD for Hinchingbrooke Hospital and Dr Foweraker, Consultant Microbiologist at Papworth Hospital.

Full details of the infection prevention and control team are provided in the organisation chart shown on page 6 of this report.

Additional support to the team is provided by a Specialist Registrar in microbiology and on-call cross cover arrangements are in place for microbiologists from Papworth, Hinchingbrooke and Addenbrooke's hospitals. Specialist advice in virology is provided by the Addenbrooke's virologists.

The infection prevention and control team provide expert knowledge, direction and education in infection prevention and control issues across the Trust. The team liaise with clinicians and directorate managers together with managers who have responsibility for Estates, Hotel Services, Clinical Governance and Risk Management and the decontamination lead. The remit of the team includes:

- To have in place policies, procedures and guidelines for the prevention, management and control of infection across the organisation.
- To communicate information relating to communicable disease to all relevant parties within the Trust.
- To ensure that training in the principles of infection control is accurate and appropriate to the relevant staff groups.
- To work with other clinicians to improve surveillance and to strengthen prevention and control of infection in the Trust.
- To provide appropriate infection control advice, taking into account national guidance, to key Trust committees.

3.3 Infection Prevention & Control Committee Structure and Accountability

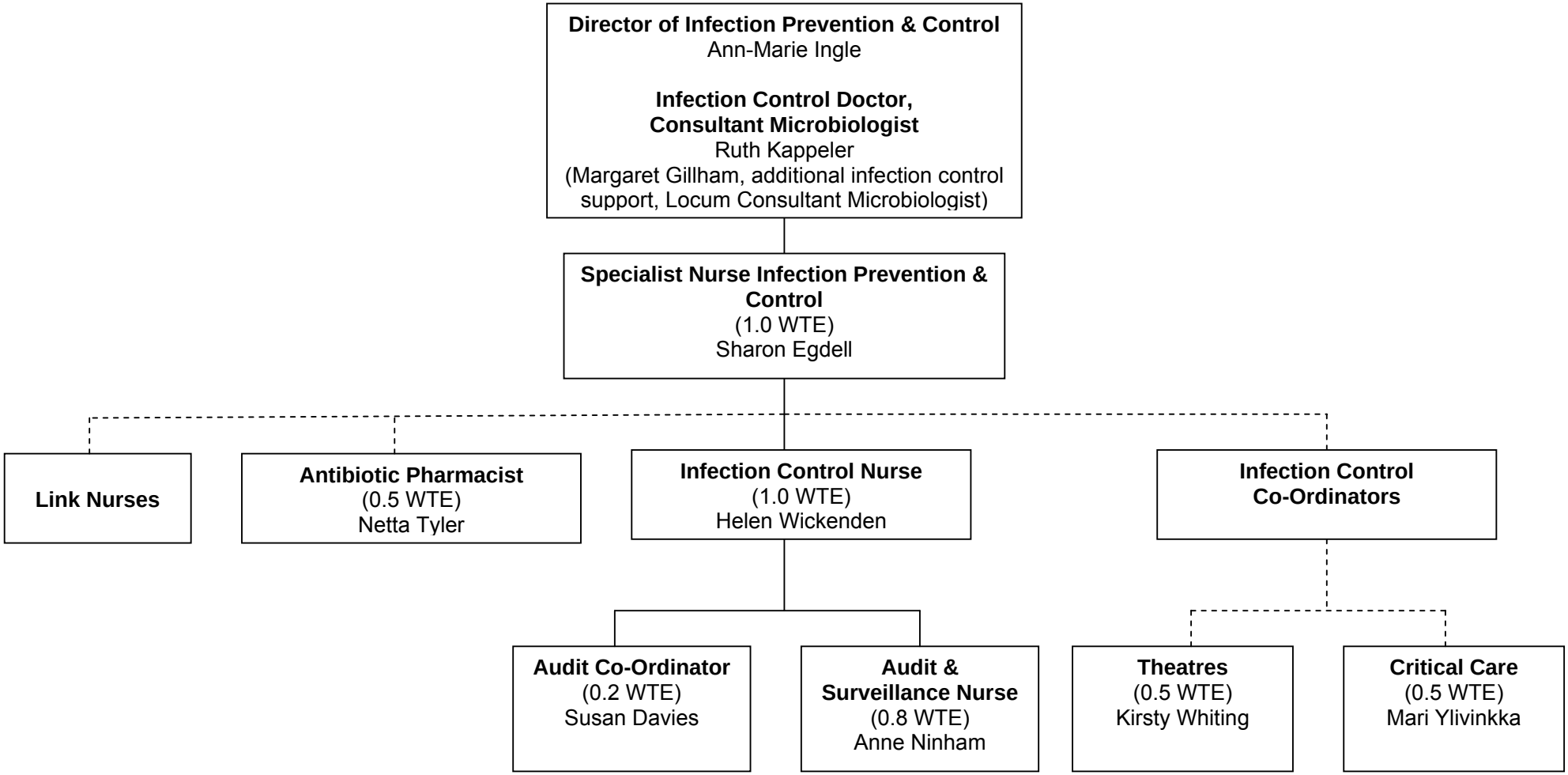
The Infection Prevention and Control Committee is the main forum for discussion concerning changes to policy or practice relating to infection prevention and control. The membership of the Committee is multi-disciplinary and includes representation from all directorates and senior management. The Committee is chaired by the Infection Control Doctor (Consultant Microbiologist), and meets 6 weekly. The Committee has a link via the Clinical Governance Management Group into the Governance Committee of the Board of Directors. The terms of reference and membership are shown in Appendix 1. The DIPC also provides a monthly report to the Board of Directors.

Additionally, clinical champions have been identified in each area who come together as an "Infection Control Link Group". This group helps to facilitate best practice and acts as a forum for education and discussion. The terms of reference are included in Appendix 2.

The relationship and reporting lines between the various committees showing Ward to Board arrangements is shown in the diagram on page 7.

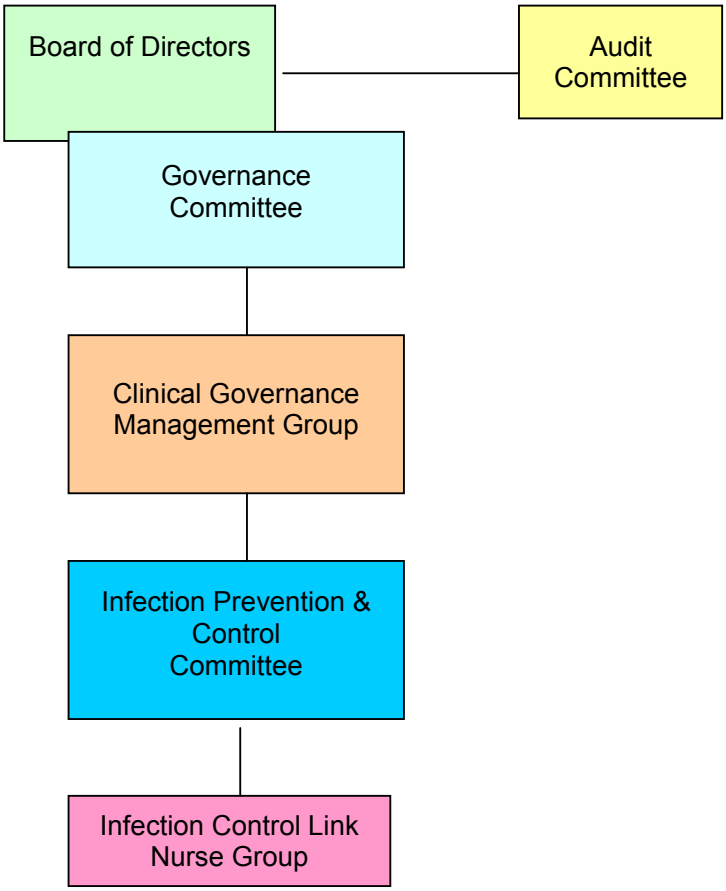
Papworth Hospital NHS
NHS Foundation Trust

Infection Prevention & Control Team



Position at 31 March 2009
WTE = whole time equivalent.

Infection Prevention & Control Committee Structure and Accountability



Committee / Group Membership					
Director of Infection Prevention & Control					
Infection Prevention & Control Doctor					
Infection Prevention & Control Nurse					
Representatives from each Clinical Directorate					
Hotel Services Manager					
Deputy Estates Manager					

Position at 31 March 2009
WTE = whole time equivalent.

3.4 Infection Control Team Representation on Committees at Papworth Hospital:

- Audit and Clinical Effectiveness Steering Group
- CCA Infection Prevention & Control Committee
- Clinical Governance Management Group
- Domestic Services Review Group
- Drugs & Therapeutics Committee
- Enteral Feeding Group
- Health & Safety Committee
- Infection Prevention & Control Committee
- Legionella Steering Group
- Links to Prescribing and Formulary Committee
- Medical Advisory Committee
- Medical Devices Group
- Pathology Management Group
- Public Health TB Forum
- Sisters Meeting
- Supplies User Group
- Theatres, Critical Care & Anaesthetics Management Group
- Tissue Viability Group

3.5 Assurance

The Assurance process includes internal and external measures. Internally, the accountability exercised via the committee structure described above ensures that there is internal scrutiny of compliance with national standards and local policies and guidelines. Furthermore, external assessments are also used. These include the "Controls Assurance" measures for infection control and decontamination standards, ISO, NHSLA standard for Infection Control and the Patient Environment Action Teams (PEAT) review. Progress in these areas during 2008/9 is summarised below.

Standards for Decontamination	Sterile Services Department has been audited and meets the requirements of disinfection, assembly, packing, moist heat and gas plasma sterilisation of theatre trays and procedure packs and supplementary instruments in accordance with ISO 13485:2003 and ISO 9001:2000. For moist heat and gas plasma sterilisation of theatre trays, procedure packs and supplementary instruments in accordance with Medical Devices Directive 93/42/EEC Annex V, Article 12 (Sterility Aspects Only).
PEAT	The score for environment and cleaning (March 2009) was 88.34% (Good)
Healthcare Commission Standards	The Trust reported compliance for 2008/09 reporting on MRSA bacteraemia number of 1 (against a ceiling target of 6) and a C.difficile reported number of 22 (19 attributable to Papworth Hospital NHS Trust against a ceiling target of 22). *

***** Papworth attributable cases are those that occur more than 72 hours after admission to Papworth Hospital NHS Trust

C4 (a)	Health care organisations keep patients, staff and visitors safe by having systems to ensure that the risk of health care acquired infection to patients is reduced, with particular emphasis on high standards of hygiene and cleanliness, achieving year-on-year reductions in MRSA.
C4 (b)	Health care organisations keep patients, staff and visitors safe by having systems to ensure that all risks associated with the acquisition and use of medical devices are minimised.
C4 (c)	Health care organisations keep patients, staff and visitors safe by having systems to ensure that all reusable medical devices are properly decontaminated prior to use and that the risks associated with decontamination facilities and processes are well managed.
C4 (d)	Health care organisations keep patients, staff and visitors safe by having systems to ensure that medicines are handled safely and securely.
C4 (e)	Health care organisations keep patients, staff and visitors safe by having systems to ensure that the prevention, segregation, handling, transport and disposal of waste is properly managed so as to minimise the risks to health and safety of staff, patients, the public and the safety of the environment.

3.6 DIPC Reports to Board of Directors

The monthly DIPC report forms part of the patient safety agenda and reports on mandatory monitored healthcare associated infections (HCAIs) such as C.difficile and MRSA, as well as other healthcare associated infections. The report also highlights any topical infection prevention and control issues and incidents occurring in clinical practice. The DIPC annual report is submitted to the Board of Directors.

3.7 Budget Allocation

Budget allocation for infection control activities:

- 0.84 whole time equivalent (WTE) Band 7 Infection Control Nurse.
- 1.0 WTE Band 6 Infection Control Nurse.
- 0.4 WTE of Consultant Microbiologist time. (
- Scientific support and technical capability is funded within the contract that the Trust has with the Health Protection Agency (HPA).
- Administrative support is provided via a team administrator (9 hours per week) and the PA to the DIPC.
- Training and IT support are funded from corporate IT and Education budgets based on any case of need submitted by the infection control team.

3.8 Infection Control Report & Programme for 2007/2008 – What We Have Achieved

The table on the following pages summarises the work undertaken by the Infection Control Team during 2007/2008.

The Report covers the following areas:

- The Health Act 2006 – Code of Practice
- Infection Prevention and Control Team
- Infection Prevention and Control Committee
- Policies and Procedures
- Audit and Surveillance
- Education
- Department of Health initiatives – Saving Lives / Clean Your Hands Campaign.

Infection Control Report for 2008/2009 – What We Have Achieved

	Action	Goal	Timeline
1	**Infection Control Team**	Increase Infection Control Doctor time to 4PAs Appoint audit and surveillance nurse Appoint 0.2 wte dedicated clinical audit project co-ordinator Appoint administrator	Achieved Achieved Achieved Achieved
2	**Information**	Designated page on hospital intranet Designated page on public facing intranet	Achieved Achieved
3	**Policies and Procedures**	Review and update MRSA procedure in line with new guidance Implementation of new MRSA screening program Rolling program of update and review	Achieved Commenced April 2009 On-going
4	**Audit**	See Appendix 4 for 2008/9 summary	Achieved
5	**Education**	Annual infection control update for consultants – three sessions Induction to all hospital staff	Achieved Achieved
6	**The Health Act**	See the Health Act - Section 5	
7	**Deep Clean Programme**	See Deep Clean – Section 5.2	
8	**Surveillance**	Mandatory Enhanced Surveillance Programme (MESS) with sign off by 15th of every month - MRSA and C. difficile MRSA clinical and screening samples, monthly MRSA new cases, daily MRSA acquisition, monthly Total Staphylococcus aureus bacteraemias,monthly GRE bacteraemias, monthly GRE clinical and screening samples, monthly ESBL bacteraemias, monthly ESBL clinical and screening samples,IPCC monthly	Achieved Achieved Achieved Achieved Achieved Achieved Achieved Achieved Achieved
9	**Feedback on Surveillance**	Monthly feedback to Board of Directors Monthly feedback to CCA Quarterly feedback to Clinical Management Groups Monthly feedback to Infection Prevention and Control Committee	On-going Achieved
10	**Meet mandatory targets**	MRSA bacteraemias 1 (target 6) C. difficile >2years reported 22, attributable to Papworth 19, (target 22)	Achieved

11	**Carry out Root Cause Analysis on all MRSA bacteraemias and all C. difficile cases since September 2007**	1 MRSA bacteraemia 22 C. difficile	Achieved
12	**New Papworth and existing Papworth new builds**	Infection Control sign-off for 3 projects	Achieved
13	**Antimicrobial Resistance**	See audit program, appendix 5	General Trust guidelines and surgical prophylaxis guidelines updated.
14	**Report / external policy review**	Strategic health Authority review visit May 2008 Healthcare commission inspection September 2008	
15	**Freedom of Information Requests**	Complete and return within required timeline	Achieved
16	**NHSLA standards**	Level 1 completed, on track for level 2 assessment	Achieved
17	**Incidents and Outbreaks**	Management of untoward incidents on-going see 4.6	Achieved

4. HCAI Statistics

4.1 Introduction

Papworth Hospital NHS Trust continues to take part in mandatory surveillance of Methicillin-resistant *Staphylococcus aureus* (MRSA) bacteraemias, Glycopeptide (or Vancomycin)-Resistant *Enterococci* (GRE/VRE) bacteraemias and *Clostridium difficile*. MRSA bacteraemias and laboratory detected C. difficile toxin results are reported monthly via the Mandatory Enhanced Surveillance Scheme (MESS) web site and signed off by the Chief Executive.

Feedback on the results for mandatory surveillance is given monthly to the Board of Directors, monthly to the Infection Prevention and Control Committee and quarterly to the Clinical Management Groups (see Appendix 3). Individual monthly results for Critical Care (CCA) are fed back monthly and discussed quarterly at the CCA Infection Prevention and Control Committee.

Additional surveillance data on *Staphylococcus aureus*, GRE, and resistant Gram negative isolates expressing Extended Spectrum B-lactamase is also collected and feedback given as that for the mandatory reports.

4.2 Mandatory Reports

4.2.1 MRSA

MRSA bacteraemia figures for the past 5 complete years are represented in the table below.

Papworth Annual MRSA Bacteraemia rates (from 1 April 2001)

01.04.01 to 31.03.02	01.04.02 to 31.03.03	01.04.03 to 31.03.04	01.04.04 to 31.03.05	01.04.05 to 31.03.06	01.04.06 to 31.03.07	01.04.07 to 31.03.08	01.04.09 to 31.03.09
12	24	13	7	14	4	5	1

The target for MRSA bacteraemias set for Papworth for 2008/9 by the Strategic Health Authority was 6. The MRSA bacteraemia was reported via the Mandatory Enhanced Surveillance Scheme (MESS). See appendix 3 for summary MESS report.

2008/9 was also a year of planning for the introduction of screening for MRSA of all elective and emergency in-patients and day cases. The monthly screening results were collated from December 2008 in preparation for the launch date of April 2009 (see Appendix 3).

4.2.2 C.difficile

C. difficile figures for the last three years are represented in the table below. The definitions for reporting of C. difficile cases have changed over the last two years. For 2008/9 all cases over the age of 2 years had to be reported. Cases were attributed to the Trust if the positive sample was taken more than 72 hours after admission.

	2005/6	2006/7	2007/8	2008/9
C. difficile >65 yrs	13	17	14	9
C. difficile < 65 yrs	15	15	11	13
Total	28	32	25	22 (19 attributable)

The target set for Papworth by the Strategic Health Authority for 2008/9 was 22 attributable cases. All C. difficile cases were reported via the Mandatory Enhanced Surveillance Scheme (MESS). See Appendix 3 for summary MESS report.

4.3 Other Surveillance Reports

	2006/7	2007/8	2008/9
Methicillin sensitive Staphylcoccus aureus bacteraemias (MSSA)	21	19	21
Glycopeptide (or Vancomycin)-Resistant *Enterococcus* (GRE/VRE) bacteraemias	3	5	5

MSSA and VRE bacteraemias are reported to the Infection Prevention and Control Committee and to the Health Protection Unit quarterly.

4.4 Wound Care

No formal surveillance has been carried out since 1 April 2008, but the Trust has been preparing for a years continuous surveillance (both HPA scheme CABG + or - Valve only patients) alongside a Trust audit of all surgical site infections) to commence on 1 April 2009. Work undertaken during this year includes:

- Employment of an Infection Audit and Surveillance Nurse to lead on the HPA audit, (Nurse Consultant Tissue Viability leading on Trust audit). Both underwent training at the HPA in September 2008 in preparation for the audit. The Audit and Surveillance Nurse has visited other centres to see how they carry out surveillance and has attended wound review clinics with Nurse Consultant in Tissue Viability so as to be able to competently identify surgical site infection signs and symptoms.

- Presentations at the hospital wide audit meeting and surgeons meeting to canvas opinions on what data they would like to see collected etc. This has been very well received by the surgeons who have all contributed to the Trust data collection form.

- Statistician involved (January 09) in the audits prior to commencement to allow the collection and analysis of meaningful data.

- The Preventing Wound Infections Steering Group met in November 2008 to consolidate previous actions and ensure all actions were incorporated into Trust policies i.e. Preventing Wound Infection Policy and Aseptic Technique Policy. This group has now reformed as the Peri-Operative Care Group as part of the Department of Health's Patient Safety Campaign key intervention "implement solutions to prevent harm". The group will continue to focus on wound infections.

- NICE released guidance on preventing surgical site infection in October 2008. The Specialist Nurse in Infection Prevention and Control and the Nurse Consultant in Tissue Viability met to review these guidelines and ensure they were being followed.

- Initial quarterly figures from the Trust audit are anticipated in August 2009. The HPA follow up surveillance is live for one year following surgery so this audit will take two years to complete and have absolute figures. The Trust audit will also follow up patients but only for 30 days post op, thus allowing us to have infection rates every quarter throughout the year's surveillance period.

4.5 Antimicrobial Resistance

Reports on resistant organisms including MRSA, GRE/VRE and Gram negative organisms expressing extended spectrum B-lactamases are collated and circulated to the Infection Prevention and Control Committee, CCA Infection Prevention and Control Committee and the CMGs as previously indicated. A review of Papworth's antibiotic guidelines was undertaken in 2008/9. The revised guidelines for the treatment of common infections and for surgical prophylaxis went live in July 2008. Particular changes included advice to doctors on documentation of indications and review dates for antibiotics and the avoidance of use of cephalosporins and quinolones.

4.6 Untoward Incidents and Outbreaks

Incident and outbreak investigations occurring in 2008/9 were reported to the hospital Infection Prevention and Control Committee throughout the year.

4.7 Outbreak update 1 April 2008 to 31 March 2009

Causative organism	No. cases investigated	Actions taken	Conclusion
Pulmonary Mycobacterium Tuberculosis	5	Reported to HPA, and Incident management team formed Appropriate follow up and contact tracing undertaken	All cases followed up and reported back to HPA. No further action required

Causative organism	No. cases investigated	Actions taken	Conclusion
Varicella Zoster Virus (chickenpox/ shingles)	5	Appropriate follow up and contact tracing undertaken	All cases followed up and concluded No further action required

Causative organisms	No. patients affected	No. laboratory confirmed	No. staff affected	Ward/Dept closed to admissions
Norovirus	19	0	1	5 days
Norovirus	14	0	3	6 days
Norovirus	15	7	10	13 days
Norovirus	3	1	0	7 days

4 separate outbreaks of suspected Norovirus (viral gastroenteritis) have been investigated by the IPCT as tabled above. In the absence of virology confirmation, case definition is based upon clinical presentation.

5. Health Act 2006 – Hygiene Code Action Plan

The following breaches were identified as a result of the spot inspection by the Healthcare commission:

Healthcare Associated Infection (HCAI) Programme of Inspections

Action Plan for Breaches

Duty 2, sub-duties, a, c, d and e
Duty 4, sub-duty a

Duty	For Immediate Action	Action Plan	Time Scale	Responsible
Duty 2a: The Trust has an appropriate Board level agreement outlining its collective responsibility for minimising the risks of infection and the general means by which is prevents and controls such risks; and the Trust has taken account of Annex 1.	The Trust's Board should ensure it has a collective agreement for its approach to HCAI and ensure that all Board members have a clear understanding of their roles in relation to HCAI.	Agenda item for Board of Directors meeting to establish collective agreement and discuss Board's responsibility This will occur as part of a patient safety workshop to be held on 9th December 08.	27 November 2008 Workshop 9 December 2008	DIPC
Duty 2c: The mechanisms by which the Trust Board intends to ensure that adequate resources are available to secure effective prevention and control of HCAI include an appropriate assurance framework; and the Trust has taken account of Annex 1.	The Trust should prioritise the objectives of the infection control programme and have an active audit programme covering all issues relating to infection control that are linked to this programme.	Objectives now prioritised – audit programme agreed.	Complete	DIPC IPCTeam
Duty 2d: All relevant staff, contractors and other persons whose normal duties are directly or indirectly concerned with patient care receive suitable and sufficient training, on the measures required to prevent and control risks of infection.	The Trust should ensure that it has a process to give contractors relevant information on infection control. It should also put in place a training programme and make certain that it has a process for the supervision of contractors working in the organisation.	▪ The IPC team will develop an information pack to be distributed to contractors by Estates ▪ Supervision of contractors and monitoring to ensure training has occurred will be checked by the Matrons.	Actioned- sent to corporate affairs for printing March 09	DIPC IPC Team Matrons Estates

Duty 2e: The Trust has a programme of audit to ensure that key policies and practices are being implemented appropriately.	The Trust should ensure that it has an appropriate audit programme covering all relevant infection control policies and procedures, and that there are systems to monitor compliance with policies.	▪ Incorporate into objectives of IPC Team. ▪ Audit programme for all policies under development.	Complete	DIPC IPC Team
Duty 4a: The Trust has <u>policies for the environment</u>, which make provision for liaison between the members of any infection control team and the persons with overall responsibility for facilities management; and the Trust has taken Annex 1 into account in forming its policies.	The Trust should ensure that all of the specified policies for the environment are in place.	All policies relevant to the environment are being reviewed by the Estates Team to ensure provision for liaison with the IPC Team. This includes: ▪ Cleaning services, ▪ Building and refurbishment, ▪ Clinical waste management, ▪ Planned preventive maintenance, ▪ Pest control, ▪ Management of potable and non-potable water supplies, ▪ Food services including food hygiene and food brought into the organisation by patient, staff and visitors.	6 months Actioned Dec 08	DIPC IPC Team Estates

The HCC plan to review our actions in 6 months time.

In addition to the recommendations made above, the following suggestions have been made:

The DIPC should have a separate section for reporting to the Board rather than being part of the Director of Nursing report.	Actioned
In addition to the DIPC, members of the infection control team, infection control doctor and matrons should be making reports to the Board on a regular basis.	D/W BoD 27.11.08 Infection Control Doctor attended BoD 29.1.09
A trust wide system for identifying clean commodes should be put in place.	Actioned

5.1 **Decontamination**

The hospital's Sterile Services Department has been audited and meets the requirements of disinfection, assembly, packing, moist heat and gas plasma sterilisation of theatre trays and procedure packs and supplementary instruments in accordance with ISO 13485:2003 and ISO 9001:2000 and Medical Devices Directive 93/42 EEC Annex V, Article 12 (Sterilility Aspects Only).

5.2 **Cleaning Services**

Deep Cleaning Programme:
A rolling deep cleaning programme to ensure all hospital bedded areas are been deep cleaned is now in place and regular Deep Cleaning Meetings ensure this work can be facilitated.

Management Arrangements:
Sodexo's on site General Manager oversees the cleaning contract and the Domestic Services Manger is responsible for the day to day running of the contract, who both support the Zonal Supervisors on a day to day basis.

Monitoring Arrangements:
An IT (Innovise) system is used to provide and monitor data with Quality Assurance in line with an agreed joint monitoring protocol. It is the duty of the Quality and Training Manager to capture and collate the information and present the information at the regular contract meetings. The implementation of zonal supervisors ensures consistent focus on both quality of service delivery and effective communication on monitoring results

Budget Allocation:
Budget allocation for 3 WTE managers and 45 domestic staff (full and part time) supported by a budget allocation for ad hoc cleans which include cleaning of barrier rooms and infection cleans.

Clinical Responsibility:
A Modern Matron attends all contractual meetings and has input into service change and will assist the domestic services supervisors on their quality control rounds.

6. Targets & Outcomes

The main infection control targets set by the Strategic Health Authority on behalf of the Department of Health have been met. The number of MRSA bacteraemias was 1 (target 6) and numbers of attributable C. difficile cases 19 (target 22).

Root cause analyses (RCAs) were carried out on all 22 C. difficile cases and the 1 MRSA bacteraemia case. This was done with involvement from the clinical teams and reported to the consultant in charge of the case. The RCAs were also presented to the IPCC 6 weekly.

7. Training Activities

Regular infection prevention and control training sessions were delivered as out-lined in the table below:

Teaching sessions	Duration	Frequency	Delivered by
Induction session for **all** new starters	1 hour 15 minutes	Monthly	IPCN
Induction session for **all** new **clinical** starters	As above plus 30 minutes on key issues	Monthly	IPCN
Induction session for **all** new medical starters	30 minutes	4 monthly	IPCD, IPCN and tissue viability
Update sessions for nurse in cardiac and thoracic directorate	I hour	Twice a month	IPCN
Update for consultant staff	30 minutes	3 times Yearly	IPCD
Sessions for other groups of staff as requested eg. pharmacy, porters, surgical care practitioners	30 minutes		IPCN/IPCD

8 Infection Control Programme and Plan for 2009/10

The challenges for 2009/10 centre around the continued prevention of all avoidable Healthcare associated infections. While MRSA bacteraemias and C. difficile cases have seen a year on year reduction in numbers, MSSA and VRE bacteraemias remain at a stable level. From April 2009, a root cause analysis into all MSSA and VRE bacteraemias will be carried out by the Infection Prevention and Control Team. This is in addition to the root cause analyses carried out into MRSA bacteraemias and C. difficile cases. MRSA screening for all elective and emergency admissions commenced April 2009. Compliance is being monitored monthly with feedback to the infection prevention and control committee. For 2009/10 focus will also centre on surgical site infections with a year long surveillance audit commencing April 2009. Efforts will continue to improve compliance with hand hygiene and the high impact interventions amongst clinical staff through audit and feedback. The Infection prevention and control team will also continue to be involved in Pandemic 'flu planning in conjunction with the other acute Trusts within the region.

Infection Control Programme 2009/10

	Action	Goal	Timeline	Responsible	Date actioned or priority if on-going
1	**Infection Control team**	Band 6 to secure funding and study leave to commence Bsc (Hons) IPC degree at University of Hertfordshire Oct 09	May 09	IPCN / DIPC	
2	**Daily management of HCAI's and infection prevention**	Ensure that known MRSA, VRE, ESBL, C. difficile patients are managed appropriately within the Trust and that any newly identified patients results are communicated to the appropriate clinical team. Daily advice for any infection control related queries.	On-going daily	IPC team	
3	**Management of incidents and outbreaks**	Immediate management of infection control related incidents and/or outbreaks	On-going daily	IPCT	
4	**Pandemic Influenza Planning**	Ensure that infection control elements of pandemic flu planning are up-to-date - procedure - up-to-date advise available to all staff - fit testing for FFP3 masks - coordinate availability of PPE - situation reporting	On-going	IPCN/IC Doctor/DIPC	
5	**Implementation of new MRSA screening procedure**	MRSA procedure on intra and internet Monitor lab screening numbers Provide feedback on compliance to all areas via the IPCC Monitor compliance through monthly reports and spot audits	March 09 Monthly On-going 6 weekly On-going		
6	**Audit**	See S:\shared\Infection Control Committee\Audit Programme\Annual audit programme\Audit programme 2009/10	On-going – see individual audit plans for prioritisation. Hand hygiene and high impact interventions take top priority	Audit &Surveillance Nurse – Modern Matrons, Link co coordinators	

	Action	Goal	Timeline	Responsible	Date actioned or priority if on-going
7	**The Health and Social Care Act (2008)**	General IPC patient info leaflet Hand Hygiene patient info leaflet *In house* MRSA patient info leaflet Internet /intranet site updates Contractors IPC information IPC link to policies on environment	Summer 09 Ongoing April 09 April 09	IPCN IPCN IPCN/ Estates Estates/ Hotel Services/ Risk management	
8	**Mandatory Reporting**	MESS Quarterly audit from REU=	On-going monthly On-going quarterly	DIPC/ ICDoctor	
9	**Root Cause Analyses**	To carry out an RCA on all MRSA, MSSA and VRE bacteraemias, and all C. difficile cases	On-going	IPCN/ IC Doctor	
10	**Review of new build designs and estates**	Infection control input to any new builds with the existing Papworth and also into the design of the New Papworth Completion of ongoing installation of additional clinical handwash sinks Hand wash sinks and Hand gel signage Install doors on ward bay areas	On-going August 09 August 09 Summer 09	IPCN/ IC Doctor Estates IPCN/ DIPC/ Estates DIPC/ Estates	
11	**NHSLA standards**	Level 2		IPCT	TNA finalised March 09 Evidence folder actioned and ongoing since Nov 08

	Action	Goal	Timeline	Responsible	Date actioned or priority if on-going
12	**Education**	Annual infection control update for consultants	Three times yearly	IC Doctor	
		Mandatory Annual Hand Hygiene and IPC update for all clinical staff	Monthly On-going	IPCN	
		Core learning unit IPC module pilot	April 09	IPCN/ Education	
		Core learning unit IPC module roll out	Summer 09	ICN/ Education	
		Induction to all hospital staff (excl doctors)	Monthly On-going	IPCN/ IC doctor	
		Induction to all doctors	Ongoing		
		IPC workbook for all clinical staff	June 09	IPCN/ Education	
		Commode cleaning protocol /educational material and DVD	June 09	IPCN/ Project lead for productive ward	
13	**Deep Clean Programme**	Action plan	See Deep Clean	Hotel Services/Sodexo/ Modern Matrons/ DIPC/IPCN	
			Ongoing annual rolling programme		
14	**Surveillance**	MRSA – daily, weekly, monthly, quarterly	On-going	IC doctor and IPCN	
		S. aureus – monthly, quarterly	On-going		
		C. difficile – daily, weekly, monthly, quarterly	On-going		
		GRE – daily, weekly, monthly, quarterly			
		Resistant Gram negatives expressing ESBLs daily, weekly, monthly, quarterly	On-going		
			On-going		
		Use of isolation rooms daily, weekly	On-going	IPCN/ Audit and Surveillance nurse/ TVN	
			On-going		
		HPA Sugical Site Surveillance programme	Start April 2009		
15	**Internal reporting**	Quarterly reports to clinical management groups	On-going quarterly	IC Doctor	
		Quarterly reports to surgical morbidity and mortality meetings	On-going quarterly	IC doctor	
		Monthly reporting to Trust Board	On-going monthly	DIPC	

	Action	Goal	Timeline	Responsible	Date actioned or priority if on-going
16	**Attendance at committees**	Infection prevention and control committee CCA infection prevention and control committee Legionella committee Infection control link coordinator meeting Deep clean meeting Joint microbiology and pharmacy meeting Wound steering committee Nursing Advisory Committee Health and Safety Committee Sisters Meeting Medical devices	On-going 6 weekly On-going quarterly On-going quarterly On-going 6 weekly On-going 6 weekly On-going quarterly On-going 6 monthly On going 6 weekly On going quarterly On going monthly	DIPC/ IPCT IPCN/IC Doctor IPCN/ IC Doctor IPCN IPCN/DIPC IC Doctor IPCN/ IC Doctor Senior IPCN Senior IPCN IPCN IPCN	
17	**Policies and Procedures**	Rolling programme for review-	On-going	IPCN/ IC Doctor	

Top Priority	
Intermediate Priority	

Appendix 1 – Terms of Reference – Infection Prevention and Control Committee

Membership

Chair:
- Infection Control Doctor / Consultant Medical Microbiologist

Members:
- Chief Pharmacist (or representative)
- Clinical Governance Manager
- Consultant Microbiologist
- Consultant Surgeon
- Director of Nursing (Director of Infection Prevention and Control)
- Estates Department representative
- Health Protection Agency representative
- Hotel Services Manager (or representative)
- Infection Control Nurse
- Occupational Health Physician or Nurse Advisor
- Radiology Manager (or representative)
- Senior Nurse Cardiac Services (or representative)
- Senior Nurse TCCA Services (or representative)
- Senior Nurse Thoracic Services (or representative)
- Sister Transplant Unit (or representative)
- Sterile Services Manager (or representative)
- Tissue Viability Nurse Specialist

Invited attendees:
- Infection Control Nurse – Hinchingbrooke Hospital
- Specialist Registrar in Microbiology

Secretary:
- PA to Director of Nursing

Aims

- To provide specialist advice, to formulate and monitor the implementation of policies and procedures, and to determine and monitor the progress of infection prevention and control at Papworth Hospital NHS Foundation Trust.

- To reduce Healthcare Associated Infection (HCAI) and deliver the target to reduce MRSA bacteraemia, utilising the delivery programme Saving Lives (DoH 2005).

Duties

i) To commission, approve (or recommend for approval) and monitor implementation of procedures and policies related to infection control, including policies for the hospital response to major outbreaks of communicable disease in the community.

ii) To develop a comprehensive prioritised action plan that incorporates national guidance and good practice.

ii) To prepare and review the progress of the annual programme of activities for infection prevention and control.

iii) To advise General Managers and the Trust Executive on funding both for the infection control programme and any contingencies.

iv) To advise directorates of problems in the control of infection in any of the clinical areas in the trust (as raised by members of the committee), and monitor the uptake of recommendations.

v) To circulate the minutes of its meetings widely and liase with medical, nursing and other committees as appropriate.

Quorum

The Committee shall be deemed quorate if there is representation of a minimum of five members. This must include at least one member of the infection control team. In the absence of the Infection Control Doctor, the Committee will be chaired by the Director of Nursing.

Frequency of Meetings

The Committee will meet on a bi-monthly basis and may convene additional meetings, as appropriate.

Minutes and Reporting

The agenda and briefing papers will be prepared and circulated in sufficient time for Committee Members to give them due consideration.

Minutes of Committee meetings will be formally recorded and distributed to Committee Members within 10 working days of the meeting. Subject the approval of the Chair, the minutes will be submitted to the Clinical Governance Management Group at its next meeting.

The minutes should also be circulated for information to the following:

- Cardiac Management Group.
- Thoracic Services Management Group.
- Transplant Steering Group.
- TCCA Directorate.

An annual report and programme of activities from the Infection Control Team should be submitted and presented to the Clinical Governance Management Group.

An annual report from the Director of Infection Prevention and Control (DIPC) should be submitted, following approval by the Committee, to the Governance Committee. This should be produced to conform to national reporting expectations.

The Committee should also report to the Chief Executive and the Board of Directors, by exception, to inform of any untoward or serious issues relating to infection prevention and control.

Acknowledgement

These Terms of Reference have been drawn up with due regard to the recommendations for the composition and conduct of infection control committees contained in *Standards in Infection Control in Hospitals* (prepared by the infection control standards working party) 1993.

The Terms of Reference have been revised to incorporate Saving Lives: A Delivery Programme to Reduce HCAI, Including MRSA (DoH 2005). Signing up to this programme by the Trust will demonstrate their commitment to patient safety and reduction of HCAI.

Appendix 2 – Terms of Reference - Infection Control Link Group
Revised July 2008

INTRODUCTION:

These terms of reference facilitate the implementation of the current best practice guidelines for the reduction of risk of infection of staff and patients.

1. GROUP COMPOSITION:

The group shall be multi disciplinary in nature and have the following permanent membership:

- Representation from each ward/clinical area
- Infection control team
- Physiotherapy

Additionally the following will be co-opted as required:

- Education and Training
- Supplies
- Risk Management
- Pharmacy
- Sterile Services
- Biomedical Engineering

2. MEETINGS

Group meetings shall be on a six weekly basis. Ideally they will be set to correspond with meetings of the Infection Control Committee meeting.

3. FEEDBACK MECHANISMS

- Minutes of group meetings will be circulated to all members, ward managers, DIPC, IC doctor and Modern Matrons within two weeks of each meeting. The minutes will also be available to view within the shared IPCC folder.
- All group members will be responsible for reporting back to their relevant ward / department managers.
- The chair of the Group will meet with the consultant microbiologist with overall responsibility for infection control.
- Additional minutes of group meetings will be circulated to Chief Nurse / Director of Patient Services.

4. AREAS OF RESPONSIBILITY:

4.1 To ensure a consistent and standard level of infection control practice throughout the hospital.

4.2 The provision of expert advice on infection control issues relevant to each member's clinical area.
- Relevant infection control developments and issues affecting Papworth
- Education session

4.3 A forum for discussing infection control practice.

4.4 Continual review of existing hospital policies relating to infection control

4.5 Undertake audits to establish if polices are being followed.

4.6. Formulation of action to be taken in response to:

- National and Trust objectives
- Hazard Notices & Safety Information Notices from the Medical Devices Agency.

Appendix 3 – Additional Surveillance Reports

Modified CMG reports year end 2008/9

Cumulative Quarterly Report for Clinical Management Groups April 2009 Quarter 4 figures - Alert Organism Surveillance 2008/9

MRSA ceiling 2008/9 = 6

	MRSA (BC)				year total
	Q1	Q2	Q3	Q4	
Total	**0**	**0**	**0**	**1**	**1**

C. difficile ceiling 2008/9 = 22

	MSSA (BC)				year total
	Q1	Q2	Q3	Q4	
Total	**9**	**7**	**2**	**3**	**21**

	Total S. aureus (BC)				year total
	Q1	Q2	Q3	Q4	
Total	**9**	**7**	**2**	**4**	**22**

	GRE (BC)				year total
	Q1	Q2	Q3	Q4	
Total	**1**	**0**	**1**	**3**	**5**

	ESBL (BC)				year total
	Q1	Q2	Q3	Q4	
Total	**1**	**0**	**0**	**0**	**1**

	C.difficile >2 years				year total
	Q1	Q2	Q3	Q4	
Total	**3**	**7**	**4**	**7**	**22**

Key:
Q1: April -June
Q2: July - Sept
Q3:Oct-Dec
Q4: Jan - March
BC: Blood Cultures
Tx: Transplant patients

End of year 2008/9 Report for Clinical Management Groups April 2009

MRSA bacteraemia = 1, against target set of 6
Total *S. aureus* bacteraemias = 22, no target set but will start root cause analysis on all *S. aureus* bacteraemias from April 2009 with the aim to reduce this number
C. difficile = 22 (the numbers attributable i.e., positive result within 2 days of admission, yet to be confirmed but likely 19), against target set of 22
This breaks down into 9 over the age of 65yrs, 13 under the age of 65 yrs
This represents a reduction in the numbers over the age of 65 years compared with 2007/8. The aim for 2009/10 will be to reduce the numbers in the under 65 yrs.

MESS Summary Reports

2008/9 MRSA MESS reported cases

Year	Month	Papworth Hospital
2008	April	0
2008	May	0
2008	June	0
2008	July	0
2008	August	0
2008	September	0
2008	October	0
2008	November	0
2008	December	0
2009	January	0
2009	February	1
2009	March	0
Total	x	1

2008/9 C. difficile MESS reported cases

Year	Month	Papworth Hospital
2008	April	2
2008	May	0
2008	June	1
2008	July	3
2008	August	3
2008	September	1
2008	October	1
2008	November	3
2008	December	1
2009	January	5
2009	February	2
2009	March	0
Total	x	22

MRSA Screening Monthly Report

MRSA Screening Monthly Returns

Month	Dec 08	Jan 09	Feb 09	Mar 09
No. of screens	106	597	582	762
No. positive	5	21	21	16

Appendix 4 - Summary of Infection Control Audit/Surveillance 2008/9

ANNUAL IP & C AUDIT PROGRAMME		Oct-08	Nov-08	Dec-08	Jan-09	Feb-09	Mar-09
TRUST PROCEDURES	**RESPONSIBILITY**						
Antibiotic guidelines for treatment of common infections DN24	Netta Tyler				X		
Antibiotic prophylaxis procedure for pacemaker and ICD insertion DN25	Netta Tyler						
Antibiotics for surgical prophylaxis procedure DN27	Netta Tyler						
Antibiotic empirical for CCA DN73	Netta Tyler						
Aseptic technique DN227	Fiona Murphy/Kathy Page/TV reps		Y				I/P
Hand hygiene procedure DN9 (App 1 for programme)	IP & C Team/Link Co-ord.	Y	Y	Y	Y	Y	Y
Isolation procedure DN89 (App 3 for detail)	IP & C Team	Y	Y	Y	Y	Y	Y
MRSA procedure DN339	IP & C Team					Y	Y
Safe handling and disposal of sharps as part of procedure DN180	IP & C Team/H & S						
TB procedure DN93 (included in weekly surveillance audit)	IP & C Team	Y	Y	Y	Y	Y	Y
SAVING LIVES HIGH IMPACT INTERVENTIONS (App 2 for prog)							
HII 1 CVC insertion and ongoing care	IP & C Team/Link Co-ord.	Y	Y	Y	Y	Y	Y
HII 2 PIVC insertion and ongoing care	IP & C Team/Link Co-ord.	Y	Y	Y	Y	Y	Y
HII 5 Ventilated patients	IP & C Team/Link Co-ord.	Y	Y	Y	Y	Y	Y
HII 6 Urinary catheters insertion and ongoing care	IP & C Team/Link Co-ord.	Y	Y	Y	Y	Y	Y
HII 7 C. diff (Adapted Saving Lives review tool in each RCA plus incorporates procedure DN226)	IP & C Team/Consultant Microbiologist	Y	Y	Y	Y	Y	A/A
MISCELLANEOUS							
Commode (Last done June 2007)	IP & C Team/External Vernacare						X
PEAT	External						Y
Point of prevalence (Antibiotics)	Netta Tyler (Pharmacy)		Y				
Sodexho Quality Control	Sue Curry/Modern Matrons	Y	Y	Y	Y	Y	X

CODES
Y = audit completed
X = audit due
A/A = audit done as/when applicable
I/P = in progress

Appendix 5 – Antimicrobial Audit Programme 2008/9

Name of audit	Person responsible	Start Date	End Date	Date presented	Where presented	Comments
Antibiotic prophylaxis procedure for pacemaker and ICD insertion guidelines	Netta Tyler	April 08	June 08	Nov 2008	Cardiologists meeting	Results discussed with the cardiac directorate.
Antibiotic Usage on RSSC over a one month period. (point of prevalence)	Netta Tyler	July 08	Sept 2008	Sept 2008	RSSC local meeting	Results to be discussed with the RSSC team to inform development of local specialist guidelines and then presented at a hospital wide audit meeting.
Annual Hospital-wide Point of Prevalence Audit.	Antibiotic Specialist Pharmacist / All ward Pharmacists	Oct / Sept 08	19th Nov 2008	16 April 2009	Hospital wide Audit Meeting	This audit will incorporate the East of England Antibiotic Prescribing Policy Standards (indications for prescribing antibiotics to be included in drug charts and in the clinical records, review date documented on drug charts and in clinical records). Results compared with previous audit (2007) and presented at hospital wide audit meeting.

Usage of antifungal agents compared with transplant directorate guidelines	Transplant Directorate Pharmacist	Nov 08			Deferred because transplant directorate guidelines under review	Will be presented at transplant audit meeting as part of a larger review of transplant antimicrobial guidelines
Collection of Microbiological specimens before Antibiotic Prescription in Critical Care	CCA SpR	Oct 2007	Sep 2008	June 2009	Hospital Wide Audit Meeting	
Antibiotic prescribing in post-operative wound infection	Pre-reg Pharmacy Student	Jan 09	Mar 09	April 09	Pharmacy Departmental meeting	To be presented to surgical audit meeting to hospital wide audit meeting July 2009.
Fosfomycin usage compared with recommendations in CF/Lung Defence Guidelines.	Pre-reg Pharmacy Student				Deferred because guidelines under review	Audit results to be presented to CF/LDC specialist team and a brief summary to hospital wide audit meeting

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Appendix 6 – Antimicrobial Audit Programme 2009/10

Name of audit	Person responsible	Start Date	End Date	Date presented	Where presented	Comments
Annual Hospital-wide Point of Prevalence Audit.	Netta Tyler	June 09 And Jan 2010	June 09 And Jan 2010		Hospital wide Audit Meeting	This audit will incorporate the Trust Antibiotic Prescribing Policy (indications for prescribing antibiotics to be included in drug charts and in the clinical records, review date documented on drug charts and in clinical records). Results compared with previous audits and presented at hospital wide audit meeting.
Quinolone usage in surgical patients(over 1 month period)	Netta Tyler	Aug /Sept 2009	Sept/ Oct 2009			Review of quinolone usage in relation to current Trust antibiotic policy.To be presented at surgical department meeting.
Annual prescription standards audit	All pharmacists	Early 2010	Early 2010		Hospital wide audit meeting and to Drugs and Therapeutics Committee.	Includes standards for documentation (review dates and indications for antibiotic prescribing)

Usage of antifungal agents compared with transplant directorate guidelines	Transplant Directorate Pharmacist	Nov 09				Will be presented at transplant audit meeting as part of a larger review of transplant antimicrobial guidelines.
Therapeutic drug monitoring	Pre-registration Pharmac Graduate	Jan 2010				Audit of monitoring antibiotic levels in relation to Trust antibiotic guidelines. To be presented to Pharmacy department and Hospital Wide Audit meeting.

Key:

Blue background: Highest priority
Yellow background: Intermediate priority