

Thames Valley University
Faculty of Health & Human Sciences



Research Centre Annual Report

Academic Year 2003/2004

Centre: **Richard Wells Research Centre**

Centre Director: **Professor Robert J. Pratt CBE FRCN**

November 2004

Highlights

- CHART, a national two year clinical trial commenced involving 24 NHS hospitals in England, funded by the Department of Health to identify how to most effectively use MRSA surveillance data and structured diagnostic tools to reduce the incidence of hospital infections;
- A international comparative study of Healthcare-associated infections conducted for the National Audit Office;
- The first clinical governance development programme for preventing healthcare associated infection in conjunction with the Clinical Governance Support Team was successfully delivered and funds for a second course secured;
- Collaboration with Hospital Infection Society, Infection Control Nurses Association and the Health Protection Agency to establish an infection prevention network;
- First PhD student registered;
- Educational and Staff Mentorship activities expanded;
- International, national and regional conference contributions significantly increased;
- Publication record in quality peer-reviewed journals continues to improve. (Appendix 1)

Introduction

Our Centre was established in 1995 to develop research and educational initiatives within the field of caring for patients with HIV disease. Over time, our remit broadened to incorporate the prevention and care issues associated with infectious diseases in general and healthcare-associated infections in particular. As the only research centre of this type in the Higher Education sector, we collaborate closely with the Department of Health (DH), the National Institute for Clinical Excellence (NICE), the NHS Modernisation Agency and a variety of relevant organisations and learned societies to establish the evidence-base for preventing and controlling healthcare-associated infections in acute, primary and community care environments.

Centre Staff

The following were the permanent staff of our Centre during this academic year:

Robert Pratt	Professor of Nursing	Research/Education *
Carol Pellowe	Principal Lecturer	Research/Education +
Heather Loveday	Principal Lecturer	Research/Education
Peter Harper	Senior Lecturer	Research/Education
Caroline Smales	Senior Lecturer	Education
Simon Jones	Senior Research Assistant	Research/Education

Meg Morse

Senior Administrator

Centre Administration

* Centre Director
+ Deputy Centre Director

Kathy Smales, Senior Lecturer provided cover this year for Caroline Smales who was on maternity leave.

Centre Mission Statement

- We value excellence in education and research as tools to enhance public health, to facilitate the continuing development of quality evidence-based healthcare and to promote social justice and equality.
- We are committed to pursuing new knowledge and developing creative educational initiatives focused on enhancing patient safety by further developing the evidence base for the prevention and control of infection and the care of patients with communicable diseases.
- In pursuit of our vision we will establish mutually supportive local, national and international multi-professional collaborative research and teaching networks with a variety of agencies, institutions, professional organisations and healthcare providers.
- We will foster and sustain a productive, high energy, team-oriented work environment that provides opportunities for all members of our Centre to make significant academic and professional contributions and to achieve personal satisfaction, growth and fulfilment.
- Through our academic endeavours, we will make a positive and significant impact on our university, community and professions.

© Thames Valley University November 2003

Centre Objectives 2003-2004

External

- Develop and formalise an ongoing TVU-led multiprofessional, multi-agency research collaboration to respond quickly to invitations to bid for government research grants. The core members of the collaboration would consist of the principal stakeholders in this field, e.g., Infection Control Nurses Association, Health Protection Agency, Hospital Infection Society, Association of Medical Microbiologists, National Association of Theatre Nurses, National HIV Nurses Association. Experience has shown that proposals submitted from this type of collaboration have immense power in influencing the award of contracts.
- Secure additional and significant contracts for research, systematic reviews and health technology assessments from the Department of Health and other government agencies, e.g., National Patient Safety

Agency, National Institute for Clinical Excellence, National Health Service.

Internal

- Lead the development, validation and delivery of two generic e-learning M-level modules in Health Protection (includes infection prevention and control) as options for the Faculty's new Master of Science programmes
- Significantly contribute to the development of the Faculty and University research infrastructure by influencing research policy and strategy through research committee activities, including the preparations for the next Research Assessment Exercise.
- Lead the Development, implementation and monitoring of quality staff development initiatives described in the Faculty's Pro-Vice Chancellor's HEFCE funded proposals for increasing research capability. This includes creating enhanced opportunities for staff development through organised programmes of research mentorship and supervision and support to staff to develop the evidence-base of their teaching.

Personal

- Publish four RAE-quality (**) academic papers in appropriate peer-reviewed journals.
- Contribute presentations to an active national and international Conference schedule.
- Significantly contribute to the teaching of specialist subjects throughout the range of programmes delivered within the Faculty.

The following report describes the extent to which we have met our objectives. We will continue to pursue these objectives during the next academic year.

Report: Centre Activities

The **epic** initiative - introduction

The **epic** initiative is a series of long-term government commissioned research projects focused on contributing to the development of the evidence base, which underpins the practice of infection prevention and control in the National Health Service (NHS). Funded principally by the DH, all phases of **epic** involve extensive collaboration with key stakeholders in this field, especially the Infection Control Nurses Association (ICNA), the Hospital Infection Society (HIS), and the Health Protection Agency (HPA).

This initiative has so far generated 1.2 million Pounds of research funding and various phases continue to be developed. During this academic year our research programme has been dominated by completing phases of various epic projects and setting up the new phases of this enquiry.

The phases of epic

- **epic phase 1 – Developing national evidence-based guidelines for preventing healthcare-associated infections in NHS Hospitals**

[Principal Investigator: Robert Pratt]

Following two years of conducting multiple systematic reviews and the critical appraisal of large volumes of evidence, the phase 1 national guidelines for preventing hospital-acquired infections in England and Wales were developed, approved and published in *The Journal of Hospital Infection* in January 2001.¹ During this academic year, we completed the systematic reviews to update the evidence base for these guidelines (see **epic phase 1b**).

- **epic phase 1a – Supporting NHS Trusts to implement national guidance for preventing healthcare-associated infections**

[Principal Investigator: Heather Loveday]

Last year the DH funded a collaboration between the Richard Wells Research Centre at Thames Valley University and the National Clinical Governance Support Team (part of the NHS Modernisation Agency) to develop a Clinical Governance Development Programme focused on preventing healthcare-associated infections (HAI). This programme is intended to support multidisciplinary healthcare teams in NHS Trusts throughout England to improve infection prevention and control services, improve practice and reduce the rates of preventable HAI. The first programme completed in January 2004 and a second course commenced in July 2004.

The programme is lead jointly by Dr. Rosemary Gillespie, Associate Director of Education for the Development Programme in the Clinical Governance Support Team, and Heather Loveday, Principal Lecturer in the Richard Wells Research Centre. Jennie Wilson, Senior Nurse Manager and Surveillance Coordinator at the Nosocomial Infection National Surveillance Unit in the Health Protection Agency, acts as the Programme Specialist Advisor.

- **epic phase 1b – Updating the evidence-base for the Phase 1 Guidelines**

[Principal Investigator: Carol Pellowe]

As part of our contractual obligations to the DH, we completed the updating of the evidence base for the phase 1 guidelines. Systematic reviews and evidence appraisals have continued in this academic year and the final report was completed and submitted to the DH in November and accepted for publication in the December issue of the British Journal of Infection Control.

- **epic phase 2a – Developing national evidence-based guidelines for preventing HAI in primary and community care services**

[Principal Investigator: Carol Pellowe]

The guidelines were approved by NICE and published in June 2003 as a short version and a special version for the public on the NICE website.² The DH then funded the joint publication of the full guidelines in special supplements of the *Journal of Hospital Infection* and the *British Journal of Infection Control*³ and circulated copies to all relevant NHS Trusts. During this year we have written extensively in professional journals and addressed many national conferences and study days to alert practitioners to their implications.

- **epic phase 3 – Enhancing the Evidence-base for Infection Prevention and Control Practices in the United Kingdom (CHART)**

[Principal Investigators: Peter Harper and Evonne Curran]

In February 2003 we commenced the initial planning stage of a two year national clinical trial to ascertain if the incidence of hospital ward-acquired methicillin-resistant *Staphylococcus aureus* (MRSA) colonisation/infection could be reduced by using Statistical Process Control (SPC) feedback and a structured diagnosis of the underlying causes of MRSA acquisition. This study, funded by the DH, is being conducted in partnership with the ICNA and 24 NHS Trusts throughout England. Following NHS Multi-Centre Research Ethic Committee (MREC) approval in December 2003, this trial commenced in April 2004 and monthly data is being collected and reported. Principal investigators reported the progress of the study in June at the DH Antimicrobial Resistance Research Programme Conference.

- **epic action – An international study of health practitioners behaviour in infection prevention**

[Principal Investigators: Heather Loveday and Robert Pratt]

Initial planning is underway to establish a large international study comparing practitioners' use and implementation of national guidelines and their adherence. This study is being conducted in collaboration with Dr Sanjay Saint at the Veteran's Administration (University of Michigan). Due to the size and complexity of this project, external funding from the Department of Health is being sought before the project begins.

- **epic international – A comparison of international practices in the management and control of healthcare-associated infections**

[Principal Investigators: Heather Loveday and Robert Pratt]

In 2003, the National Audit Office (NAO) conducted a Value for Money study to evaluate improvements that the National Health Service has made in the management and control of healthcare-associated infections (HAI) as a follow-up to their report in February 2000 on *The Management and Control of Hospital-acquired Infections in Acute NHS Hospitals*.⁴ We were

commissioned to develop a component of this study which compared infection prevention and control practices and policies and the extent and costs of HAI in England with selected countries in North America, Australasia and the European Union. Our report was published by NAO in July 2004.⁵

- **National Healthcare-associated Infection Research Network**

[Principal Investigator: Robert Pratt]

On behalf of the Infection Control Nurses Association (ICNA), we are leading the initial discussions at the Department of Health (DH) this year to establish a national HAI network of stakeholder research groups. This initiative is being established by the ICNA, the Hospital Infection Society, the Health Protection Agency and the British Society for Antimicrobial Chemotherapy and supported by the DH. The purpose is to define for the DH current research priorities for preventing HAI. The network will be formally launched at a conference in 2005.

Systematic Review of Interventions to Prevent the Transmission of Methicillin Resistant *Staphylococcus aureus* in Hospital

[Principal Investigator: Heather Loveday]

This review was commissioned in April by the Department of Health on behalf of the Joint MRSA Working Party. The review will be used to inform the development of new evidence-based guidelines for the prevention and control of MRSA in hospitals. The review was completed and submitted in October and is now being readied for publication.

Additional Activities

- **Living Well – Primary Care Trusts of Ealing, Hammersmith & Fulham, Hounslow, Hillingdon, Brent & Harrow, Westminster, Redbridge and Waltham Forest.**

[Principal Investigators: Simon Jones]

Funded by the NHS, Living Well is an initiative for HIV-positive people who live, work or use a HIV/AIDS treatment centre in the West London area. The aim of the programme is to enable people with HIV to enhance their health and sense of wellbeing by taking greater control of their lives and making informed choices regarding antiretroviral therapy. Following our critical review of the forerunner programme in East London, we were commissioned to develop an evaluation strategy for this programme and to provide ongoing evaluation support to the Project in West London. Our contract for a second evaluation was renewed and findings were presented at the World AIDS Conference in Bangkok in July 2004.⁶

- **National Institute for African Studies (NIAS)**

[Principal Investigators: Robert Pratt and Carol Pellowe]

During this academic year, in partnership with the National Institute for African Studies in Slough, we continued to teach and further develop and prepare the curriculum for validation for a part-time course for African Community Leaders in Berkshire, focused on developing their knowledge and skills in order to support Africans resident in the UK who are affected by HIV/AIDS. This course ('Engaging AIDS'), delivered at TVU Slough, was well evaluated and is continuing in the next academic year with TVU accreditation.

- **Infection Control Nurses Association of the British Isles**

The Centre has established formal collaborative links with the Infection Control Nurses Association (ICNA). Professor Robert Pratt is the Association's President, Heather Loveday is their Educational Adviser, and Peter Harper is supporting ICNA research activities. This collaboration is designed to jointly develop research, education and guideline development projects. CHART (described above) is a product of this partnership.

- **The Lodge - Sexual Health and HIV Services in Bedfords and Luton Community Care NHS Trust**

[Principal Investigator: Carol Pellowe]

The Centre has continued for the ninth year to support sexual health and HIV infection prevention training delivered by the Lodge to healthcare and health promotion staff in the Bedfordshire area. This involves teaching the first day of a two-day orientation and training programme and facilitating one specialist subject day. This has generated significant income for the Centre

Research Students & Faculty Staff Mentorship

Our first research student registered for a PhD during this academic year. In addition, all research active staff are allocated 110 hours each for mentoring Faculty Staff. This has included mentoring staff completing courses and those who have been granted extended study leave.

PhD Student

Eilidh Macrae. *Approaches to interpreting antiretroviral resistance, their relative effectiveness and use in the clinical management of people living with HIV.*

[Supervisors: Robert Pratt, Clive Loveday, Sibel Roller, Carol Pellowe]

Our Teaching Contribution to our Faculty

All teaching staff allocated 110 hours each to support Faculty teaching programmes and taught specialist subjects, e.g., infectious diseases, medical sciences, infection prevention and control, and research methods, in a range of certificate, diploma, degree and post-graduate level courses.

In addition, for a second year, the Centre took academic leadership of the quantitative research methods module in the MA in Research Methods programme.

The Centre also developed two Masters level modules in Health Protection and Patient Safety, i.e.,

- *The Population:* This module will address the needs of the population in relation to health protection from infectious diseases. It will enable participants to consider the population within their own practice area and reflect upon characteristics of the population, i.e. age, gender, race and ethnicity and infectious diseases notifications.
- *Preventing infection: Delivering the Service:* This module will provide students with the skills to examine their own organisation's service delivery in health protection/ infection prevention and control and devise a strategy to improve delivery in one area.

These modules were ready for validation but due to the decision not to proceed with a Masters in Health and Social Care, the Centre will develop a post graduate certificate in health protection in the next academic year with a view to offering a Masters programme by September 2005.

Certificates in Personal and Professional Development (CPPD)

[Educational Lead: Caroline Smales]

The Centre continues to be responsible for the ongoing development and delivery of all Faculty CPPD programmes focused on:

- Tuberculosis: Healthcare Management
- Infection Control: Principles and Practices
- Management and Care of People with Infectious Diseases

Supporting Our Learning Communities

All Centre research and teaching staff are attached to a Learning Community where they contribute to its strategic development and facilitate collaborative practice-led research and scholarly activity. Although off to a somewhat slow start, we are now involved in collaborative research with Learning Community colleagues. Additionally, senior Centre staff participate in the evaluation of this initiative.

Below is an example of service-initiated collaborative research that Centre staff are supporting.

▪ **HARP – Healthcare Assistant Research Project**

[Principal Investigator: Simon Jones]

In collaboration with The Lister Hospital in the Chelsea and Hammersmith Learning Community, we evaluated the impact of introducing healthcare assistants into their nursing service. This project is scheduled to be delivered in November 2004.

Key Areas of Continuing Professional Development for Centre Staff

All Centre colleagues agree their individual staff development programme at their annual performance review. Conference attendance remains an important staff development mechanism and this year colleagues have attended conferences relevant to our research programmes, e.g., clinical governance and guideline development, infection control and prevention, and infectious diseases (Appendix 1).

Carol Pellowe submitted her EdD thesis in August 2004 and her viva is expected late November.

Peter Harper has been granted extended study leave, commencing September 2004 in order to complete his doctoral study.

Simon Jones completed his PG Certificate in Teaching and Learning, MA in Video Production and PG Diploma in Research during this academic year. He also attended a short course on Systematic Reviews at the University of Oxford and joined the Higher Education Academy.

Membership of Advisory Groups

The profile of the Centre has continued to be raised by the work of individual Centre staff working as advisors and members of government committees, professional organisations, expert reference groups, local government and health authorities and as external examiners to other Universities. Centre staff formally advise or support the following:

- Department of Health, Chief Medical Officer's Expert Advisory Group on AIDS (EAGA) **Robert Pratt**
- National Patients Safety Agency. Reference Group for the Hand Hygiene Project **Heather Loveday**
- Health Protection Agency (Advisory Group to Lead Nurse) **Heather Loveday**
- Manchester University (Mildmay International) **Carol Pellowe (External Examiner)**
- North East Wales Institute of Higher Education **Carol Pellowe (External Examiner)**

- National HIV Nurses Association
Robert Pratt (Patron); Heather Loveday (Research Awards Adviser) Carol Pellowe (Boehringer Ingelheim Award Adviser)
- Infection Control Nurses Association of the British Isles
Robert Pratt (President); Heather Loveday (Educational Adviser); Peter Harper (Research Adviser)
- The Lodge (Sexual Health and HIV Services in Bedfordshires' Community Care NHS Trust) **Carol Pellowe (Educational Adviser/Facilitator)**
- The following London Primary Care Trusts: Ealing, Hammersmith & Fulham, Hounslow, Hillingdon, Brent & Harrow, Westminster, Redbridge and Waltham Forest. (Living Well Project) **Simon Jones**

Income Generation

A separate report with a restricted distribution details the exact income generated during this academic year and is available from the Faculty Finance Officer. The Centre met its agreed income generation target for this academic year.

Our Publication Record

All research active Centre staff published in peer review journals and the total volume and quality of publications was excellent (Appendix 2).

END



ROBERT J PRATT CBE FRCN
Professor of Nursing
Centre Director

10 November 2004 CP/RJP:me

References

1. Pratt RJ, Pellowe C, Loveday HP, Robinson N, Smith GW, and the **epic** guideline development team; Barrett S, Davey P, Harper P, Loveday C, McDougall C, Mulhall A, Privett S, Smales C, Taylor L, Weller B, and Wilcox M. The epic Project: Developing National Evidence-based Guidelines for Preventing Healthcare associated Infections. Phase 1: Guidelines for Preventing Hospital-acquired Infections. *Journal of Hospital Infection* 2001;**47**(Supplement):S1-S-82. Available at: <http://www.doh.gov.uk/HAI>
2. National Institute for Clinical Excellence (NICE) at: <http://www.nice.org.uk/>
3. Pellowe CM, Pratt RJ, Harper P, Loveday HP, Robinson N, Jones S, MacRae ED, and the Guideline Development Group: Mulhall A, Smith G, Bray J, Carroll A, Chieveley Williams S, Colpman D, Cooper L, McInnes E, McQuarrie I, Newey JA, Peters J, Pratelli N, Richardson G, Shah PJR, Silk D, Wheatley C. Infection Control: Prevention of healthcare –associated infection in primary and community care. Simultaneously published in: *Journal of Hospital Infection* December 2003 ;**55**(Supplement 2):1-127 and *British Journal of Infection Control* December 2003; **4**(6) (Supplement):1-120. Available at: <http://www.epic.tvu.ac.uk/Downloads/epic%202a%20download%20page.html>
4. National Audit Office. *The Management and Control of Hospital Acquired Infection in NHS Acute Trusts in England* (HC 230 Session 1999-00). London. NAO. February 2000.
5. National Audit Office. *Improving patient care by reducing the risk of hospital acquired infection: A progress report* (HC 876 Session 2003-2004). London. NAO. 14 July 2004.
6. Jones S, Miller J, Ojwang T, Tan H, Pratt R. An Evaluation of the West London Living Well Programme. (Poster). In: Programme and abstracts of the 15th International AIDS Conference, July 11-16, 2004; Bangkok, Thailand.

Appendix 1: Our Conference Activities 2003-04

We presented the following papers/posters at regional, national and international conferences during this academic year:

- Pratt RJ. The Graham Ayliffe Annual Lecture. AIDS: A Plague That Won't Go Away. Infection Control Nurses' annual conference, 30 September 2003, Telford.
- Pellowe C. The NICE Guidelines, Infection Control: Prevention of healthcare-associated infection in Primary & Community Care. Infection Control Nurses' annual conference, 30 September 2003, Telford.
- Pellowe C. Preventing infection in community & primary care. Study day: Prevention & Control of Infection; everyone's business, 10 October 2003, Royal Cornwall NHS Trust, Truro.
- Harper P. Update on Chart. Wessex ICNA Professional Study Day, 6 November 2003, Dorset County Hospital, Dorchester.
- Loveday HP. What Works – The Evidence for Hand Hygiene. Changing Professional Practice, 30 January 2004, Royal College of Physicians of Edinburgh.
- Loveday HP. Hand Hygiene Workshop. Occupational Health and Safety Conference, 24-25 February 2004, Church House London.
- Pratt RJ. HIV-related Tuberculosis. North West TB Nurses' Association, 6 May 2004.
- Pellowe C. Epic guidelines. Infection Control Study Day, Wycombe Hospital. 25 May 2004
- Pellowe C. Infection control in the community. Primary Care 2004 conference, 6-7 May 2004, National Exhibition Centre, Birmingham.
- Pellowe C. The experience of being identified antenatal HIV positive antenatally. International Congress of the International Society of Psychosomatic Obstetrics and Gynaecology, 16-19 May, Edinburgh 2004.
- Pratt RJ. Haematological Manifestations of HIV Disease: A Review. Annual National Conference on Advanced Haematology, 14 June, Hammersmith Hospital.
- Pratt RJ. Evidence-based Approaches to Preventing Catheter-related Bloodstream Infections. Sharing Best practice Conference, 18 June 2004, Rotheram.
- Pratt RJ. Opening Review. 6th Annual National HIV Nurses Association. Diversity in Nursing conference, 24-25 June 2004, Manchester.
- Loveday HP, Harper P. The CHART Project. Department of Health Antimicrobial Resistance Research Programme Conference, 24 June 2004.
- Jones S, Miller J, Ojwang T, Tan H, Pratt R. An Evaluation of the West London Living Well Programme. (Poster). In: Programme and abstracts of the 15th International AIDS Conference, July 11-16, 2004; Bangkok, Thailand.
- Pellowe C. Prevention of healthcare associated infections in primary and community care. Nursing in Practice Conference, British Design Centre, London, 8-9 September 2004.

Appendix 2: Our publications during 2003-04

- Pellowe CM, Pratt RJ, Harper P, Loveday HP, Robinson N, Jones SRLJ, MacRae ED and the Guideline Development Group: Mulhall A, Smith G, Bray J, Carroll A, Chieveley Williams S, Colpman D, Cooper L, McInnes E, McQuarrie I, Newey JA, Peters J, Pratelli N, Richardson G, Shah PJR, Silk J, Wheatley C. Infection Control: Evidence-based Guidelines for Preventing Healthcare-associated Infections in primary and community care. Simultaneously published in: *Journal of Hospital Infection* 2003; **55** (Supp 2); S1-S127 and *British Journal of Infection Control* 2003 (Sup): 1-120.
- Pellowe C, Pratt R. Preventing health-care associated infections during enteral feeding. *Nursing Times* 2003;**99**(46):57.
- Pellowe C, Pratt R. Protecting Patients From Infection. *Frameworks* **10**:75-78.
- Pellowe C, Pratt R. Catheter-associated urinary tract infections: primary care guidelines. *Nursing Times* 2004;**100**(2):53-55.
- Pellowe C. Sexual health in Ireland. *HIV Nursing* 2004; **4**(2):5-6.
- Pellowe CM, Macqueen S, Coe L. Using evidence-based infection control guidelines to prevent healthcare associated infections in the neonatal unit. *Journal of Neonatal Nursing* 2004;**10**(5):6-10.
- Jones S, Miller J, Ojwang T, Tan H, Pratt R. An Evaluation of the West London Living Well Programme. (Poster). In: Programme and abstracts of the 15th International AIDS Conference, July 11-16, 2004; Bangkok, Thailand.
- Jones S. The Hong Kong Film Industry. Online *Kamera* publication: http://www.kamera.co.uk/features/the_hong_kong_film_industry.php, 2004.
- Jones S. The 3rd London Science Fiction and Fantasy Film Festival. Online *Kamera* publication: http://www.kamera.co.uk/features/the_3rd_london_science_fiction_and_fantasy_film_festival.php, 2004.
- Pellowe CM, Pratt RJ. ICNA regional workshops - using national evidence-based guidelines to reduce the risk of catheter-related urinary tract infections: report of post-workshop activities and outcomes. *British Journal of Infection Control* 2004;**5**(4) 23-25.
- Harper P, Jones SRLJ, Curran ET. Charting CHART's progress. *British Journal of Infection Control* 2004; **5**(5):10-11.
- Pratt RJ. Changing our spots (editorial). *British Journal of Infection Control* 2004; **5**(2)5.
- Pratt RJ. Infection Awareness in the NHS: winners and Losers. *European Hospital Decisions* 2004; **4**:90-91.
- Pratt RJ. An evidence-based approach to preventing healthcare-associated infections in the elderly – the epic initiative in England. *The Journal of the Royal College of Physicians of Edinburgh* 2004; **34**(1) 11-15.

END OF REPORT