



THAMES VALLEY  
UNIVERSITY

**Faculty of Health and Human Sciences**

## **Research Centre Annual Report**

Academic Year 2005/2006

*Centre:* **Richard Wells Research Centre**

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

Report compiled by Dr Carol Pellowe

30 November 2006

## Highlights

- Completion of epic2 National evidence based guidelines for preventing healthcare associated infections in NHS hospitals in England;
- Completion of CHART, a national two year clinical trial involving 24 NHS hospitals in England, funded by the DH to identify how to most effectively use MRSA surveillance data and structured diagnostic tools to reduce the incidence of hospital infections
- Establishment of the National HCAI Research Network within RWR;
- Establishment of a Joanna Briggs Collaborating Centre;
- Publication of a seminal systematic review on behalf of the DH on interventions to prevent the transmission of endemic methicillin resistant *Staphylococcus aureus* (MRSA) in acute care settings;
- Collaboration with the London-wide 'Living Well' Programme (Expert Patient Initiative) for people living with HIV/AIDS continued;
- Educational and Staff Mentorship activities expanded;
- PhD students increasing
- Publication record in quality peer-reviewed journals continues. (Appendix 1)

This year the Centre has completed two major projects: CHART (Collaborative research to reduce the incidence of hospital ward-acquired methicillin-resistant *Staphylococcus aureus* (MRSA) colonisation/infection, using Statistical Process Control (SPC) feedback and structured diagnosis of the underlying causes of MRSA acquisition) and the updating of the epic guidelines (epic2). In addition, two significant developments within the centre; the establishment of the DH National HCAI Research Network and the Joanna Briggs Collaborating Centre, both of which will greatly enhance our work in the future.

## 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 HCAI in particular. As the only research centre of this type in the Higher Education sector, we collaborate closely with the DH, the National Institute for Health and Clinical Excellence (NICE), the Health Protection Agency (HPA) and a variety of relevant organisations and learned societies to establish the evidence-base for preventing and controlling HCAI in acute, primary and community care environments.

## Centre Staff

The following were the permanent staff of our Centre during the 2005/6 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	Lecturer	Research/Education
Jennie Wilson	Visiting Research Fellow	Research <sup>‡</sup>
Meg Morse	Senior Administrator	Centre Administration
Alison Tingle	Principal Research Programme Officer	

\* Centre Director  
+ Deputy Centre Director  
‡ Health Protection Agency

## Centre Mission

- 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.

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## Centre Objectives 2005-2006

### External

- Establish a facility to manage the national HCAI Research Programme on behalf of the DH.
- Develop a national blended e-learning programme for the NHS on behalf of the NHS Core Learning Unit.
- Secure additional and significant contracts for research, systematic reviews and health technology assessments from the DH and other government agencies.

### Internal

- Lead the development and validation of an MSc in Health Protection and Patient Safety.

- Significantly contribute to the development of the Faculty and University research infrastructure by influencing research policy, strategy and governance through active participation in research committee activities, including ethical peer review and preparations for the 2008 Research Assessment Exercise.

#### Individual

- Publish two 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 that underpins infection prevention and control practice in the NHS. Funded principally by the DH, all phases of **epic** involve extensive collaboration with key stakeholders in this field, especially the ICNA, the HIS, and the HPA. This initiative has so far generated over 1.5 million Pounds of research funding and new phases continue to be developed. More than any other project, the epic initiative established both our credentials in the field of infection prevention and control and our expertise in conducting complex systematic reviews.

- **epic2 National evidence based guidelines for preventing healthcare associated infections in NHS hospitals in England**

[Principal Investigator: Robert Pratt]

In June 2005, the DH contracted us to update the epic phase 1 guidelines. This involved an additional systematic review in all six topic areas. The guidelines are complete and will be published as a supplement in the *Journal of Hospital Infection* in January 2007.<sup>1</sup> In addition, a patients' version has been developed and submitted to the DH.

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

[Lead Investigators: Peter Harper and Evonne Curran]

In February 2003 we commenced the initial planning stage of a two year national clinical trial to 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, was conducted in partnership with the ICNA and 24 NHS Trusts throughout England. This trial completed in April 2006 and results have been presented at a variety of national and international conferences.

- **epic update – Monitoring the changing evidence for the prevention of HCAI**

[Principal Investigator: Heather Loveday]

During this academic year, we completed two contracts with DH to conduct a systematic review to identify changes in evidence, emerging technology and other national and international evidence and guidelines for preventing HCAI, and to prepare briefs for and respond to departmental and ministerial enquires. We reviewed and advised on an e-learning infection prevention and control programme developed by NHSE Scotland for use by the NHS in England. In addition, we conducted evidence reviews to inform NHS Trust staff uniform policies and laundering, i.e., the role of uniforms in transmitting infection.

- **epic MRSA evidence review - Systematic review of interventions to prevent the transmission of meticillin-resistant *Staphylococcus aureus* (MRSA) in hospitals**

[Principal Investigator: Heather Loveday]

This systematic review, commissioned by DH on behalf of the Joint MRSA Working Party, was undertaken to inform the development of the new national guidelines for preventing MRSA transmission in hospitals. The full review was published in the *Journal of Hospital Infection* in 2006.<sup>2</sup>

### **Additional Activities**

- **Caring: Perceptions and context of nursing and midwifery care in London in the 21<sup>st</sup> Century: A preliminary scope of published literature from 1995-2005**

[Principal Investigator: Heather Loveday]

A preliminary scope of the United Kingdom (UK) practice-based research literature was commissioned from the RWR and Centre for Midwifery and Childbirth by the London Network for Nursing and Midwifery (LNNM). The purpose of the review was to provide an insight into the research evidence that explored perceived changes in the expression of caring behaviours in nurses and midwives practicing London. Peer reviewed research literature from January 1995 to December 2005 was located and appraised using a systematic approach. An interim report containing the narrative synthesis of the literature and overview of the literature and the emerging themes was presented at the LNNM Conference in March 06.

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

[Principal Research Officer: Alison Tingle]

In early 2006, the Department of Health's National HCAI Research Network was established with the responsibility for managing this initiative contracted to the Richard Wells Research Centre. The Network is directed by Professor Robert Pratt and supported by a group of senior research staff within the Centre. The day to day management of the Network is being undertaken by its Principal Research Officer, Alison Tingle and Professor David Edwards has joined the Network as its scientific advisor.

The key aims of the HCAI Research Network are to contribute to the strategic development of the national research agenda in this field and support and manage DH funded HCAI-related research.

The Network is already managing and supporting major projects recently funded through the Department's Policy Research Programme's call for research into the cost-effectiveness of interventions for the control of HCAI. These include a diverse range of studies such as those focusing on the role of managing the hospital environment, environmental decontamination, MRSA carriage in care home settings and modelling MRSA intervention policies.

An Advisory Board for the HCAI Network, chaired by Professor Charles Easmon, Deputy Chairman of the Health Protection Agency Board, is being established and its primary function will be to advise on national priorities for HCAI research.

In addition, the Network is developing plans to:

- coordinate with other research funders to explore how best to bring relevant research into the managed Network;
- enhance research capacity and capability in this area (by providing relevant interdisciplinary research training and opportunities for methodological support and advice to HCAI researchers);
- provide support to research groups for research governance and ethical approval processes.

The Network has established its own website which provides more detailed information about its activities [www.hcainetwork.org](http://www.hcainetwork.org)

- **National Health Service Core Learning Unit**

[Project Director: Robert Pratt, Project Manager Carol Pellowe]

In collaboration with the Faculty's Distance Learning Unit and Intuition Publishing Ltd. (Dublin), we developed a blended e-learning infection prevention and control programme for the NHS.<sup>3</sup> This initiative has been funded by the NHSU/DH and is now part of the NHS Core Learning Unit's core e-learning programmes. The programme is a major development for

our Centre as it is intended that this multidisciplinary programme will be mandatory for all 1.3 million clinical and non-clinical employees of the NHS. Negotiations are taking place to expand the programme for clinical staff.

- **JBI Collaborating Centre**

[Deputy Director; Carol Pellowe]

This year we became a collaborating centre of the Joanna Briggs Institute, Adelaide. This initiative is in collaboration with the Centre for Midwifery and Childbirth and the Centre for Research in Clinical Practice. The JBI has as its central focus the effectiveness, appropriateness, meaningfulness and feasibility of healthcare practices. JBI through its collaborating centres undertakes systematic reviews and produces a variety of resources to encourage the implementation of evidence-based practice in healthcare settings.

The directors attended the JBI Colloquium and Director's meeting in Durban and were invited to give the keynote address on the work of RWR. Discussions also took place about organising a comprehensive systematic review training course at TVU in the autumn.

- **Living Well with HIV/AIDS – Expert Patient Initiative**

[Project Manager; Simon Jones]

Having originally developed the evaluation tools and strategy for this pan-London DH Expert Patient Initiative, we are under contract to conduct an annual evaluation of this programme in NHS Trusts and corresponding local government authorities in London. Evaluation analyses have been presented at several international conferences.<sup>4</sup>

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

[Lecturers Robert Pratt and Carol Pellowe]

During this academic year, in partnership with the National Institute for African Studies in Slough, we continued to teach on the 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 Diploma in HIV/AIDS is validated by TVU and delivered at TVU Ealing. It was well evaluated and is continuing in the next academic year. In addition, RWR staff moderate the assignment for the other modules.

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

The Centre has established formal collaborative links with the Infection ICNA. Professor Robert Pratt is the Association's President and Heather Loveday is a member of association's Research and Development Group and a member of the Scientific Programme Committee for the ICNA Annual Conference.

CHART (described above) is a product of this partnership. During this academic year, Heather Loveday published the association's research strategy.

## Research Students & Faculty Staff Mentorship

This year has seen an increase in the number of PhD students enrolling with the centre and those a previously enrolled continue to make good progress.

### PhD Students

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

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

Sangeetha Parmasivan *South Asian Women and sexual health: attitudes, knowledge, behaviour and experiences. Implications for public health and sexual health services*

[Supervisors: Carol Pellowe, Debra Bick,]

Jennie Wilson	Nosocomial infection surveillance	Enrolled 2004
Simon Jones	to be confirmed	Enrolling 2006/7
Heather Loveday	PhD by publication	Enrolling 2006/7

## Our Teaching Contribution to our Faculty

All academic staff were 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, the Centre took academic leadership of four of the six modules in the MSc in Research Methods programme.

The Centre's plans for an MSc in Health Protection and Patient Safety have progressed well and we anticipate validating the programme in 2007 and running it from October 2007.

- **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
- Evidence based practice

- **Contributions to University and Faculty Committees**

All academic members of the Centre are allocated 110 hours each per academic year to provide research mentorship to Faculty staff.

Members of the Centre are involved in appropriate research committees, including the University Research Committee, Faculty Research Committee (FRC), University and Faculty Research Assessment Exercise (RAE) sub-committees, Faculty Research Ethics Committee, Faculty Research Institute Advisory Committee, and the Academic Planning Committee.

Prof. Robert Pratt is Chair of the FRC, the Faculty RAE sub-committee, the University website review sub-committee. Dr Carol Pellowe is the Deputy Director for the Joanna Briggs Collaborating Centre. Heather Loveday is the Chairperson of the Faculty Research Ethics Committee.

## **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. This has included research awareness sessions at St Mary's Hospital, Paddington and contributing to their professional development programme. At Northwick Park the Essence of learning documents have been updated.

## **Key Areas of Continuing Professional Development for Centre Staff**

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

- Peter Harper has completed his doctoral programme. His thesis "Learning about Research: A dialectical exploration of the educational experiences of nurses and their teachers" will be examined in the autumn.
- Simon Jones completed his MSc Research Methods with distinction.
- Caroline Smales completed her Postgraduate diploma in Research Methods.

## 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:

- 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)**
- 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 until September 2005); Heather Loveday (Research and Educational Adviser)**
- The following London Boroughs: Barking & Dagenham; Brent; Camden; Ealing, Hackney; Hammersmith & Fulham; Haringey; Harrow; Hillingdon; Hounslow; Islington; Kensington & Chelsea; Waltham Forest; Westminster. (Living Well Programme)  
**Simon Jones (Project Manager)**

## Income Generation

A separate report with a restricted distribution details all income generated during this academic year and is available from the Faculty Finance Officer. The total amount of income generated almost a third of a million Pounds and the Centre exceeded 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

31 November 2006 CP/RJP/

## References

1. Pratt RJ, Pellowe CM, Wilson JA, Loveday HP, Harper PJ, Jones SRLJ, McDougall C, Wilcox MH. epic2: National Evidence-Based Guidelines for Preventing Healthcare-associated Infections in NHS Hospitals in England. *Journal of Hospital Infection* January 2007;**65**(1): supplement 1: *in press*.
2. Loveday HP, Pellowe CM, Jones SRLJ and R.J. Pratt A systematic review of the evidence for interventions for the prevention and control of meticillin-resistant *Staphylococcus aureus* (1996–2004): report to the Joint MRSA Working Party (Subgroup A) *Journal of Hospital Infection*, Volume 63, Supplement 1, May 2006, Pages S45-S70.
3. Pratt RJ, Pellowe CM, Shelley J, Adams J, Loveday HP, King D, Jones SRLJ. Using a blended e-learning model to provide accessible infection prevention and control training for NHS staff: The NHSU/TVU/Intuition approach. *British Journal of Infection Control* 2005;**6**(2):16-18.
4. 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.

## 5. Appendix 1: Our Conference Activities 2005-06

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

- Pellowe C. *Developing the evidence-base for the prevention and control of healthcare-associated infections in England*. Waves of Knowledge. 5<sup>th</sup> Joanna Briggs Colloquium, 7 August, 2006; Durban, South Africa.
- Pellowe C. *HIV antenatal testing ;are we doing a good job?* Waves of Knowledge. 5<sup>th</sup> Joanna Briggs Colloquium, 7 August, 2006; Durban, South Africa.
- Jones SRLJ. *Publish or they Perish*. (Poster). In: Programme and abstracts of the 16<sup>th</sup> International AIDS Conference, August 13-18, 2006; Toronto, Canada.
- Harper P. *“Confounding Variables” or the Key to Understanding What’s Really Going On?* In the International Institute for Qualitative Methodology, 7<sup>th</sup> International Interdisciplinary Conference - Advances in Qualitative Methods Programme and Abstracts; July 13-16, 2006; Surfers Paradise, Queensland, Australia: p55.
- Loveday HP. *Caring: Perceptions and context of nursing and midwifery care in London. A preliminary scope of published literature from 1995-2005*. London Network for Nurses and Midwives Annual Conference; 21 March 2006; London.
- Pratt RJ. *Best practice in using central venous access devices*. RCN Intravenous Therapy Forum Conference; 4 October 2005; London.
- Pratt RJ, Pellowe CM. *Developing a blended elearning infection prevention and control education programme for the NHS*. Time for Action Conference of the ICNA, 28 September 2005; Torquay.
- Loveday HP. *Research and Development: The ICNA strategy for research and development 2005 – 2010*. Time for Action Conference of the ICNA, 26-29 September 2005; Torquay.

## Appendix 2: Our publications during 2005-06

- Pratt RJ, Pellowe C, Adams J, Jones S, Loveday HP, Shelley J, King D. Beating the bug. *Nursing Management* March 2006;12(10)24-27.
  - Pellowe C, Pratt RJ. Neonatal conjunctivitis and pneumonia due to chlamydia infection. *Infant* 2006;2(1):16-17.
  - Pellowe C. Hands up: how clean are your hands? *Nursing in Practice* May/June 2006;34-37.
  - Loveday HP, Pellowe CM, Jones SRLJ, Pratt RJ. A systematic review of the evidence for interventions for the prevention and control of meticillin-resistant *Staphylococcus aureus* (1996-2004): report to the Joint MRSA Working Party (Subgroup A) *Journal of Hospital Infection* 2006: 63, Supplement 1, 45-70.  
<[http://www.sciencedirect.com/science?\\_ob=GatewayURL&\\_method=citationSea](http://www.sciencedirect.com/science?_ob=GatewayURL&_method=citationSea)
  - Pratt R. Behold a pale horse: confronting 21st century plagues. *British Journal of Infection Control* 2006;7(5):10-13.
  - Pratt RJ, Pellowe CM. Preventing perinatal and infant HIV infection. *Infant* 2006;2(3):58-61.
  - Pratt RJ, Curran ET. Personal respiratory protection and tuberculosis: national evidence-based guidelines in England and Wales. *British Journal of Infection Control* 2006; 7(3):15-17.
  - Curran ET, Hoffman PN, Pratt RJ. Tuberculosis and infection control : a review of the evidence. *British Journal of Infection Control* April 2006;7(2):18-23.
- Pellowe C, Pratt R, Loveday H, Harper P, Robinson N, Jones SR. The epic project: updating the evidence base for national evidence-based guidelines for preventing healthcare-associated infections in NHS hospitals in England. A report with recommendations. [Letter] *Journal of Hospital Infection* April 2006; 59(4):373-4.
- Pratt RJ. Preventing healthcare associated infections: an essential component of patient safety. *Saferhealthcare* Published online 30 November 2005 by Patient Safety Agency, BMJ Publishing Group, and the Institute for Healthcare Improvements.

Pratt RJ, Pellowe CM, Loveday HP, Jones SRLJ. Research at the cutting edge of practice. *British Journal of Infection Control* 2005;6(6):9-11.

### Appendix 3: Income generation 2005-06

Department of Health (England)	
<ul style="list-style-type: none"> <li>• CHART MRSA Surveillance/Statistical Process Feedback – National RCT</li> </ul>	151,798
<ul style="list-style-type: none"> <li>• Department of Health HCAI Research Network</li> </ul>	75,000
<ul style="list-style-type: none"> <li>• Evaluation and Adaptation of NHS Education Scotland ‘Cleanliness Champions’ infection control programme</li> </ul>	2,475
<ul style="list-style-type: none"> <li>• epic Systematic Reviews and National Guideline Development Update <u>and</u> Uniform Infectivity Systematic Review</li> </ul>	72,000
London Borough of Hammersmith and Fulham	
<ul style="list-style-type: none"> <li>• Living Well Evaluation (Expert Patient Initiative)</li> </ul>	15,000
Cardiff University	
<ul style="list-style-type: none"> <li>• Research Mentoring</li> </ul>	500
South West London Health Authority	
<ul style="list-style-type: none"> <li>• Caring Project – Systematic Review</li> </ul>	4,775
<b>Total</b>	<b>321,548</b>

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