

SIRCH

**Systems & Intervention
Research Centre for Health**

School of Nursing, Midwifery and Postgraduate Medicine

Centre Report

2009

Centre Report

Level 1 Research Group

SIRCH overview

Background:

The Systems and Intervention Research Centre in Health (SIRCH) was approved as a Level I Faculty Designed Research Group in December 2005 and a Level II Research Centre in 2009 with the designation to commence in 2010.

Aims:

The Systems and Intervention Research Centre for Health (SIRCH) has the primary focus of developing a sustainable health workforce.

SIRCH's research projects develop and test approaches that aim to improve equity of, and access to, affordable, safe and high quality healthcare. The Centre's approach is instrumental in driving interprofessional learning both in Western Australia, and nationally, and devising transdisciplinary solutions to system-wide problems.

Since its establishment, SIRCH has demonstrated a track record in combining intervention-orientated research and evaluation and systems improvement across the following domains: policy and planning; legislation; workforce development; and education and training.

In the past year, SIRCH has consolidated its performance and has achieved an income of \$1,465,435 and 35 projects (30 completed and reconciled) since its inception.

Centre Strategies:

- Investigating new directions for inter-professional learning that help professionals understand issues within larger systemic contexts, beyond clinical roles.
- Creating integrated and sustainable community engagement initiatives that build both individual and social capacity and thus strengthen the health and related workforce;
- Conducting research to help devise new strategic health policy directions;
- Designing innovative models for cross-sectoral collaboration to deliver safe and high quality care and improve service responses; and
- Developing new models of health care system and service level planning and delivery.

The Management/Advisory structure of the Research Unit

Membership:

SIRCH core team:

Principal: Associate Professor Moira Sim, Coordinator, Graduate and Higher Degree Program;

Co-Principal: Professor Cobie Rudd, Associate Dean – Health;
Chair in Mental Health Nursing

Centre Manager: Toni Wain, Project Manager;

Research Assistant: Danni Urzillo.

SIRCH advisors:

The following group collaborates and provides directions for projects, primarily through email correspondence with face-to-face meetings where required.

The membership of this group will be reviewed annually (due December 2010).

- Professor Beth Walker; Faculty of Business and Law, School of Management;
- Professor Colleen Hayward, Head of Centre - Kurongkurl Katitjin;
- Associate Professor Lynne Cohen, Associate Dean Teaching and Learning;
- Dr Simon Towler, Chief Medical Officer, Department of Health;
- Roslyn Elmes, Director, Public Health and Ambulatory Care DoHWA;
- Catherine Stoddart, Chief Nursing Officer, DoHWA;
- Michele Kosky, Director, Health Consumers' Council of WA (or nominee).

SIRCH investigators & collaborators

We include those we have worked with on tenders, grants applications and publications. This group of associate members can be expanded at anytime. These associate members are acknowledged in SIRCH annual reports, may be co-authors and co-presenters at conferences, and are listed as relevant on tenders and industry and competitive grants.

- Dr Eric Khong, Senior Lecturer, SNMPM;
- Associate Professor Richard Brightwell, Paramedical Sciences
- Steve Johnson, Senior Lecturer Paramedical Sciences
- Professor Anne Wilkinson, WA Cancer Council Chair in Palliative & Supportive Care, SNMPM;
- Associate Professor Roger Clarnette;
- Dr Ann Choong;
- Dr Joyce Hendricks, Senior Lecturer, SNMPM;
- Richard Bostwick, Senior Lecturer, SNMPM;
- Pam McCrorie, Lecturer, SNMPM;
- Professor Brenda Cherednichenko, Pro-Vice Chancellor (Engagement, Equity and Indigenous);
- Professor Wendy Cheng, Head of Liver Clinic, Royal Perth Hospital;

- Etza Peers, Sir Charles Gairdner Hospital;
- Dr Roger Swift, Sir Charles Gairdner Hospital;
- Judith Bevan, Sexual Health & Blood-borne Virus Program, Department of Health;
- Associate Professor Simon Forrest, The Combined Universities Centre for Rural Health;
- Associate Professor Dawn Bessarab, Curtin University of Technology;
- Professor Donna Mak, The University of Notre Dame;
- Dr Antonio Buti, University of Western Australia;

Achievements and activities

The ECU Health Simulation Centre

The ECU Health Simulation Centre is a 1,500 square metre multi-functional facility that houses state of the art simulation suites flexible to match a wide variety of health treatment situations.

Locating the ECU Health Simulation Centre with the System and Intervention Research Centre for Health provides the Centre with opportunities to expand its research

interests and expertise. In particular, developing simulations to bridge the theory-practice gap, improve trans-disciplinary communication and enhance practitioner capacity and confidence.

Interest in our simulation facilities in 2009 has been significant, with a number of State and private hospitals, community agencies and State and Commonwealth Government agencies visiting the campus to view the facility.

Simulations events hosted include:

- An observation simulation demonstration for Senator Michaelia Cash and the Crime Corruption Commission.
- A simulation event on risk for AIMS.
- A series of midwifery observational simulation events held for Joondalup Health Campus.
- Simulations for the Hands on Training (HOT) program

Grants awarded in 2009: *5 grants, \$397,678 in total*

Retention and Persistence Transition Support Program (RaPTS)

Funding agency: ECU Higher Education Equity Support Program Funding

Grant received: \$8,500

Grant awarded to: Ms Toni Wain

Project aim: To pilot a mentoring program to retain nursing students.

Date grant awarded: 2 June 2009, completed December 2009.

Hands on Training (HOT) Program

Funding agency: Office of the Chief Nursing Officer, Department of Health, WA

Grant awarded to: Professor Cobie Rudd & Associate Professor Moira Sim

Grant Received: \$20,025

Project aim: Implementation of two, week-long placements for Year 10 students interested in nursing as a career.

Date grant awarded: 6 August 2009, completion date June 2010.

Hepatitis C on-line training website maintenance and review & Hepatitis B on-line training website development, maintenance and review.

Funding agency: Communicable Disease Directorate, Department of Health, WA

Grant received: \$340,818

Grant awarded to: Associate Professor Moira Sim & Dr Eric Khong

Project aim: To maintain and review the hepatitis C on-line training website for health professionals and develop, maintain and review a hepatitis B on-line training website for health professionals

Date grant awarded: 15 September 2009, completion date June 2012.

HoT 'n' Deadly! Nursing and Paramedics

Funding agency: ECU, Teaching and Learning Grants

Grant received: \$8,535

Grant awarded to: Professor Cobie Rudd, Associate Professor Moira Sim, Toni Wain, Dr Richard Brightwell.

Project aim: To recruit Indigenous students into nursing and paramedicine and facilitate staff and student engagement with the Indigenous community.

Date grant awarded: 17 September 2009, completion date June 2010.

Provision of an e-learning package for advanced care directives.

Funding agency: Office of the Chief Medical Officer, Department of Health, WA

Grant received: \$19,800

Grant awarded to: Associate Professor Moira Sim, Professor Anne Wilkinson (WACPC), Toni Wain, Dr Eric Kong, Dr Roger Clarnette, Professor Cobie Rudd.

Project aim: Develop and e-learning package for advanced care directives.

Date grant awarded: 22 September 2009, completed January 2010.

Ongoing projects in 2009:

The Development and Implementation of a Mental Health Major

Funding agency: Australian Government Department of Health and Ageing.

Grant received: \$66,194.

Grant awarded to: Professor Cobie Rudd.

Project aim/outcome: To develop a mental health major option within the Bachelor of Science (Nursing).

Date awarded: November 2008, completed December 2009.

Leadership program

Funding agency: Faculty of Computing, Health and Science.

Grant awarded to: Dr Joyce Hendricks.

Grant received: \$10,000.

Project aim/outcome:

Date awarded: 19 October 2008, completed 2009.

Workforce Development Program in Hepatitis C

Funding agency: Department of Health WA.

Grant received: \$144,208.00.

Grant awarded to: Associate Professor Moira Sim.

Project aim/outcome: Increase health professional's knowledge of Hepatitis C and its treatment through the establishment of an on-line education program.

Date awarded: 20 May 2008, completed June 2009.

Investigation into English Language Competence for English as a second language students undertaking Nursing Training at an Australian University

Funding agency: Office of Chief Nursing Officer, Department of Health WA

Grant received: \$15,000

Grant awarded to: Associate Professor Christopher Churchouse

Project aim: To identify if students undertaking a Bachelor of Science (nursing) Program show a change in English language proficiency from enrolment into the program to graduation.

Date awarded: 20 May 2008, completion date February 2012.

Promotion of the nursing profession to secondary school students program

Funding agency: Department of Health WA.

Grant received: \$20,025.60.

Grant awarded to: Professor Cobie Rudd.

Project aim/outcome: Implement two, week-long placements for Year 10 students interested in nursing as a career.

Date project awarded: 5 May 2008, completed January 2009.

Mental Health Curriculum in Pre-registration Nursing Degrees

Funding agency: Australian Government Department of Health and Ageing.

Grant received 2008: \$55,390.00.

Grant awarded to: Professor Cobie Rudd.
Project aim/outcome: To enhance mental health skills of the newly graduating health workforce.
Date awarded: 5 May 2008, completed May 2009.

Recruit and retain Indigenous health professionals, particularly nurses, through the establishment of partnerships and development and implementation of appropriate strategies.

Funding agency: ECU Office of Research & Innovation.
Grant amount applied for: \$26,463.00 (Strategic Initiative Grant).
Grant awarded to: Professor Cobie Rudd, Associate Professor Moira Sim.
Project aim/outcome: To develop strategies to recruit and retain Indigenous students in health disciplines and establish networks to support them in career choices and transition from school to higher education.
Date awarded: 10 July 2007, project start date - 12 August 2008, completed November 2009.

Development of Healthcare Simulation Centre

Funding agency: Laerdal Pty Ltd.
Grant committed: \$50,000.00 per annum to 2010.
Grant awarded to: Professor Cobie Rudd.
Project outcome: Establishment of ECU Healthcare Simulation Centre.

Making changes across the hospital in the treatment of patients with alcohol and drug issues.

Funding agency: ECU Industry Collaborative Grants.
Grant amount applied for: \$19,417.00.
Grant awarded to: Associate Professor Moira Sim, Professor Cobie Rudd.
Project aims/outcome: Examine processes followed by Sir Charles Gairdner Hospital (SCGH) to implement changes in policy, attitude and practice in the management of patients in alcohol withdrawal.
Date awarded: 1 August 2007, completed October 2009

Provision of a Post Registration Training course for Enrolled Nurses on 'Care in the Community'

Funding agency: Office of Chief Nursing Officer, Department of Health WA.
Grant received: \$59,100.00.
Grant awarded to: Professor Cobie Rudd.
Project aim/outcome: Development of a discussion paper and a 'Care in the Community' course for Enrolled Nurses.
Date awarded: 26 June 2007, completed 2009

Publications and conference presentations

Publications:

Encyclopedia of the life course and human development (pp. 134-137)

Authors: Wilkinson, A. M., & Sim, M. (2009).

Book: End of life decision making. In D. Carr (Ed.), Detroit: MacMillan Reference USA.

Medical morbidity and severity of depression in a large primary care sample of older Australians: the DEPS-GP project.

Authors: Pfaff, J. J., Draper, B. M., Pirkis, J. E., Stocks, J. A., Snowden, J. A., Sim, M. G., Byrne, G. J., Lautenschlager, N. T., Flicker, L. A., Kerse, N. M., Goldney, R. D., & Almeida, O. P.

Journal: *The Medical Journal of Australia*, 2009, 190(7), S75-S80.

Influencing behaviour change in general practice (Part 1): Brief intervention and motivational interviewing.

Authors: Sim, M., Wain, T. & Khong, E.

Journal: *Australian Family Physician*, 2009; 38(11): 885-888

Influencing behaviour change in general practice (Part 2): Motivational interviewing approaches.

Authors: Sim, M., Wain, T. & Khong, E.

Journal: *Australian Family Physician*, 2009; 38(12): 986-989

Motivational interviewing in general practice.

Authors: Sim, M., Khong, E., & Wain, T.

Publication: Check program of self-assessment, 451 (2009). The Royal Australian College of General Practitioners: South Melbourne: ISSN 0812-9630.

Conference presentations:

Community Partnership Tool Box

Conference: Australian Health Promotion Association, 18th National Conference.

Location & date: Perth Convention Centre, 17-20 May 2009

Presenters: Cecily Strange and Professor Cobie Rudd.

Finding solutions with young people with alcohol and other drug issues

Conference: Positive Schools 2009 Mental Health and Wellbeing Conference.

Location & Date: Perth, 22 May 2009.

Presenter: Associate Professor Moira Sim

Collaborations and external linkages

A range of partnerships (N=35) have been forged to progress SIRCH's research agenda.

In respect to research into community engagement and models of engaged research, affiliations through the International Association for Research in Service Learning and Community Engagement (IARSLCE) have opened up both organisational and individual new partnerships, predominantly in the US and Canada.

To develop the ECU Healthcare Simulation Centre, SIRCH forged collaborations with partners in Oregon, New Zealand, the UK and across Australia to progress the business model, design of the facility, and a research agenda. This research agenda in healthcare simulation is a fast-growing field, and includes investigations in areas such as:

- Interpersonal and team communication patterns and effectiveness;
- Longitudinal studies to measure process, impact and outcome of different approaches and delivery modes for simulation;
- Longitudinal studies to measure impact of simulation on graduate attributes and workforce retention;
- The impact of simulated experiential learning on clinical outcomes for multi-disciplinary and multi-organisational teams;
- Application of simulation and scenario based learning in mental health;
- The role for simulation in competency development and assessment and the ramifications for professional accreditation;
- Development of a model for use of standardised patient equivalents; and
- The criteria for certification in the field of simulation.

Interest in the facilities offered by the ECU Health Simulation Centre from the State Government, Commonwealth Government, professional bodies, community and industry, has been significant. SIRCH has established a strong partnership with Laerdal Pty Ltd, evidenced by its commitment of funding for business development of the ECU Centre for Excellence in Healthcare Simulation. An addition, Laerdal Pty Ltd, has funded SIRCH to develop healthcare simulation scenarios (co-badged), which are now promoted internationally.

Grants have been received from a number of departments within the Western Australian Department of Health that reflect the key activities of SIRCH to recruit and implement nursing career choices and enhance the skills of health service workforce, these including:

- Office of the Chief Medical Officer;
- Office of the Chief Nursing Officer; and
- Communicable Disease Directorate

Partnerships with hospitals, general practice, mental health, carers and Indigenous representative agencies have been forged in recognition of the

Centre's contribution to translating theory into practice for system change and to improve health service operations and workforce wellbeing. In 2009 these included:

- Collaboration with Kurongkurl Katitjin (ECU), the Combined Universities Centre for Rural Health, Notre Dame University, Curtin University, the University of Western Australia, the Health Consumers Council and the Aboriginal Health Council of Western Australia to develop a proposal for the Australian Learning and Teaching Council. The project aims to establish a national library of flexible learning resources originating from Indigenous stories of experiences within the health system.
- Partnerships with Sir Charles Gairdner Hospital to research successful change mechanisms to improve care for patients with alcohol use issues.
- Partnerships with Joondalup Health Campus, King Edward Memorial Hospital, Sir Charles Gairdner Hospital and Osborne Park Hospital to show case the diversity of nursing as a career (as part of the HOT program).

Research collaborations include participation as investigators in research grants led by other universities, such as:

- UWA: Associate Professor Moira Sim is a Chief Investigator on a Healthway grant "Promoting physical activity to improve the outcome of depression in later life" awarded to Professor Osvaldo Almeida at the School of Psychiatry and Clinical Neurosciences at UWA (\$359,957).
- Flinders University: Professor Cobie Rudd has been on the team of an ALTC grant application led by Flinders University.

Community engagement

Members of SIRCH maintain their commitment to engaging with the community through roles on international and local education and industry committees as well as through education events for health professionals, health students and the community.

Appointments include:

Associate Professor Moira Sim

- Clinical Associate Professor, School of Psychiatry and Clinical Neurosciences, University of Western Australia
- Medical Practitioner, Impairment Review Committee, Nurses & Midwives Board of Western Australia
- Panellist, Impairment Review Committee and Professional Standards Committee, Medical Board of Western Australia
- Chairperson, Medical Executive Committee, Osborne Park Hospital
- Medical Defence Association President's Medical Liaison Council
- Member, Western Australian Council for Safety and Quality in Health Care (2002-).

- Member, Psychotherapeutic Drugs Committee of the Western Australian Therapeutics Advisory Group
- Member, Western Australian Department of Health Musculoskeletal Network Executive Advisory Group
- Member, Care and Services Strategic Advisory Group, Amana Living (formerly Anglican Homes) (2006-).

Professor Cobie Rudd

- Board Member (International Representative), International Board of the Directors for the International Association for Research in Service-Learning and Community Engagement.
- Chair, Nominating Committee of the International Board of the Directors for the International Association for Research in Service-Learning and Community Engagement.
- Chair, Combined Universities Centre for Rural Health (CUCRH).
- Director, Public Health Institute of Western Australia Board.
- Member, International Advisory Board of Nurse Education Today.

Education events include:

Alcohol in the community (11 Feb 2009). Notre Dame University medical student lectures. , Associate Professor Moira Sim.

Change talk: Motivational interviewing (20 Feb 2009). Western Australian Cardiovascular Health and Rehabilitation Association, Associate Professor Moira Sim.

The Australian Healthcare System (26 Mar 2009). Anhui Tour Group to Perth, Edith Cowan University, Associate Professor Moira Sim.

Overview of Australian's Health (1 April 2009). Anhui Tour Group to Perth, Edith Cowan University. Dr Eric Khong

Hepatitis C: An e-learning project (4 April 2009). Rural Health West. Associate Professor Moira Sim & Dr Eric Khong

UWA Medical Students PBL tutorial in Addiction Medicine (20 & 23 April 2009). Dr Eric Khong

UWA Medical Students PBL tutorial in Addiction Medicine (21 & 23 April 2009). Associate Professor Moira Sim

Managing aggressive behaviours in general practice (23 May 2009). Osborne GP Network. Associate Professor Moira Sim & Dr Eric Khong

Managing aggressive behaviours in general practice (23 May 2009). Perth Primary Care Network. Associate Professor Moira Sim & Dr Eric Khong

Panel Member for Child and Youth Health Network Stakeholder Forum (5 June 2009). Government of Western Australia Department of Health. Associate Professor Moira Sim

Mental Health Professionals Network Workshop (10 June 2009). Associate Professor Moira Sim

Managing aggressive behaviours in general practice (18 June 2009). Canning Division of General Practice. Associate Professor Moira Sim & Dr Eric Khong

Alcohol and other Drugs Problem Based Learning (16 and 20 July 2009). UWA 4th Year Medical Students, Royal Perth Hospital. Dr Eric Khong

Managing aggressive behaviours general practice (12 August 2009). Third Avenue Surgery. Associate Professor Moira Sim & Dr Eric Khong.

Addressing alcohol use before and during pregnancy (27 August 2009). Women's and Newborn Health Service Complex Care Study Day, Associate Professor Moira Sim.

Hepatitis C Shared Care Project (2 September 2009). Department of Health Western Australia Sexual Health Forum, Associate Professor Moira Sim.

Drugs, Doctors and Impairment (30 September 2009). Anaesthetic Department, Princess Margaret Hospital, Associate Professor Moira Sim.

Hip/Knee osteoarthritis: From conservative treatments to joint replacement surgery (20 October 2009) Osborne Park Hospital, Associate Professor Moira Sim.

SIRCH member supervision of higher degree students

SIRCH member supervision of higher degree students

PhD students

Student Name and study level: Richard Bostwick
 Supervisors: Professor Cobie Rudd (Principal Supervisor) and Professor Alfred Allan (Co-Supervisor, School of Psychology)
 Research topic: Mental health literacy of students who access tertiary education institutions.

Student name and study level: Terri Burton
 Supervisors: Associate Prof Christopher Churchouse (Principal Supervisor), Dr Joyce Hendricks and Prof Cobie Rudd (Co-supervisors)
 Research topic: Eating Disorders in Pregnancy Narratives

Student name and study level: Kesaraporn Wanajak
 Supervisors: Professor Cobie Rudd (Principal Supervisor) and Professor Anne Wilkinson (Co Supervisor)
 Research topic: Internet Addiction Among Thai High School Students

Student name and study level: Jonathan Mould
 Supervisors: Professor Cobie Rudd (Principal Supervisor); Professor Anne Wilkinson (Co Supervisor)
 Research topic: Paediatric nursing: An investigation of the effect of paediatric nurse education and quality of children's nursing care in Western Australia

Master by research students

Student name and study level: Mark Morrissey
 Supervisors: Professor Cobie Rudd (Principal Supervisor); Associate Professor Moira Sim (Co Supervisor)
 Research topic: Government policy and child health.

