



Centre Report

2008

Centre Report

Level 1 Research Group

SIRCH overview

Introduction:

Background:

The Systems and Intervention Research Centre in Health (SIRCH) was approved as a Level 1 Faculty Designed Research Group in December 2005.

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 inter-professional learning both in Western Australia, and nationally, and devising trans-disciplinary 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 \$1,062, 757 income, and 30 projects (17 completed and reconciled) since 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 Working Group:

Principal: Professor Cobie Rudd, Chair in Mental Health Nursing and Head of School;

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

Centre Manager: Toni Wain, Project Manager;

Postdoctoral Research Fellow: Dr Shirlee-ann Knight

SIRCH Members:

Chair: Professor Cobie Rudd, Chair in Mental Health Nursing and Head of School, School of Nursing, Midwifery and Postgraduate Medicine.

Members:

- Associate Professor Moira Sim, Coordinator, Graduate and Higher Degree Systems Program;
- Associate Professor Christopher Churchouse, Clinical Lead ECU Healthcare Simulation Centre;
- Postdoctoral Research Fellow, Dr Shirlee-ann Knight;
- Centre Manager, Toni Wain, Project Manager;
- Research Assistant and Administration Officer for Healthcare Simulation Centre, Danni Urzillo;
- Active research staff.

SIRCH Advisory Group:

- Executive Dean nominee (Associate Dean Research and Higher Degrees, Professor Paul Lavery);
- Adjunct Associate Professor Alan Philp, Director, Health Branch, WA Office, Department of Health and Ageing;
- Professor Beth Walker; Faculty of Business and Law, School of Management
- Roslyn Elmes, Director, Public Health and Ambulatory Care DoHWA;
- Adjunct Associate Professor Cath Stoddart, Chief Nursing and Midwifery Officer, DoHWA;
- Ms Michele Kosky, Executive Director, Health Consumers' Council of WA (or nominee); and
- Mr Mark Morrissey, Executive Director, Child and Adolescent Community Health Division, Child and Adolescent Health Service, Department of Health WA.

This group is regularly called upon to provide strategic advice to SIRCH, serve on interview panels, and comment on SIRCH's directions where required. The membership of this group will be reviewed annually (due December 09).

SIRCH Associate Members

We include as SIRCH Associate members those we have worked with on tenders, grants applications and publications.

- Associate Professor Lynne Cohen, School of Psychology and Social Sciences, Associate Dean Teaching and Learning, Faculty of Computing Health and Science;
- Professor Anne Wilkinson, WA Cancer Council Chair in Palliative & Supportive Care, SNMPM;
- Dr Eric Khong, Senior Lecturer, SNMPM;
- Dr Joyce Hendricks, Senior Lecturer, SNMPM;
- Dr Jane Mulcock, Researcher, SNMPM;
- Richard Bostwick, Senior Lecturer, SNMPM;
- Jonathan Mould, Lecturer, SNMPM;
- Amanda Swift, Course Coordinator, Undergraduate Nursing, SNMPM;
- Caron Shuttleworth, Coordinator: Faculty Practice, SNMPM;
- Cecily Strange, Project Coordinator, SNMPM;
- Jackie Soutar, Practitioner Scholar in Forensic Mental Health Nursing, SNMPM;
- Vicki Cope, Lecturer – Midwifery, SNMPM;
- Irene McPhee, Lecturer, SNMPM;
- Gina Mata, Lecturer, SNMPM; and
- Helene Metcalfe, Lecturer, SNMPM.

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.

Achievements and activities

The ECU Health Simulation Centre

**Health
Simulation
Centre**



In December 2007 the SIRCH moved into the new Health and Wellbeing Building on the Joondalup Campus. The 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 CEHS with the System and Intervention Research Centre for Health will provide 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 2008 has been significant, with a number of State and private hospitals, community agencies and State and Commonwealth Government agencies visiting to campus to view the facility. Simulations events recently hosted include events for WA Country Health Services, Marr Mooditj Foundation and “Hands on Training” Program.

In 2008, the Health Simulation Centre was the State Winner for the HESTA Australian Nursing Awards Innovation in Nursing Award.



April 2008: WA Country Health Services - *Simulation taken from Coronial Inquest*

**Grants awarded in 2008:
in total**

10 grants, \$373,409.60

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

Date awarded: November 2008.

Leadership program

Funding agency: Faculty of Computing, Health and Science

Grant awarded to: Dr Joyce Hendricks

Grant received: \$10,000

Date awarded: 19 October 2008.

**Creating a School that Welcomes and Support Diversity Project
Funding agency: ECU Higher Education Equity Support Program
Funding**

Grant Received: \$9,460

Project aim: Create whole-of-School strategies that welcome and supports students and staff from widely diverse backgrounds.

Date project awarded: 21 August 2008, completed December 2008.

**Investigating Alternative Learning Strategies for Equity Groups Project
Funding agency: ECU Higher Education Equity Support Program
Funding**

Grant Received: \$10,829

Project aim: Investigate the application of scenario based learning using simulation as a complementary learning and teaching tool for undergraduate nursing students.

Date project awarded: 21 August 2008, completed December 2008.

Falls Linkage Independence Program Evaluation Framework

Funding agency: Department of Health WA

Grant Received: \$15,840.00

Grant awarded to: Dr Eric Khong

Project outcome: Develop an evaluation framework for Falls Linkage Independence Program

Date project awarded: 24 June 2008, completed August 2008.

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: Increase health professional's knowledge of Hepatitis C and its treatment

Date awarded: 20 May 2008

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

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 outcome: Implement two week long placement 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: To enhance mental health skills of the newly graduating health workforce.

Date awarded: 5 May 2008

Recruit and retain Indigenous health professionals, particularly nurses, though 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: 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

Ongoing projects in 2008:

Development of Healthcare Simulation Centre

Funding agency: Laerdal Pty Ltd.

Grant committed: \$50,000.00 per annum to 2009

Grant awarded to: Professor Cobie Rudd

Project outcome: Funding for Clinical Manager of the ECU Healthcare Simulation Centre.

Longitudinal study for an Early Career Development Program

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

Grant received: \$22,000.00

Grant awarded to: Professor Cobie Rudd

Project aim: Establish a research plan for ARC funding for nursing career pathway development.

Date awarded: 7 June 2007

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: \$14,417.00

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

Project aims:

- To determine impact of the Clinical Nurse Consultant's (CNC's) role as alcohol and drug educator and nurse consultants and the development and implementation of the alcohol withdrawal chart on nursing staff attitudes, knowledge and confidence in managing patients with significant alcohol use.
- Examine processes followed in Sir Charles Gairdner Hospital (SCGH) to implement changes in policy, attitude and practice in alcohol and drug patient management.
- Identify personal and organisational attributes necessary to facilitate changes across the hospital.
- Explore important alliances and role placement to engender system change.
- Devise strategies for ECU and hospitals to educate nurses to take a leadership role in change management.

Date awarded: 1 August 2007

Rural Excellence in Nursing

Funding agency: Rio Tinto Iron Ore (RTIO)

Grant received 2007-2009: \$180,000 over 3 years (60,000 per annum 2007 – 2009)

Grant awarded to: Professor Cobie Rudd

Project aim: To support nursing students to undertake health assessments of community members and RTIO employees in Paraburdoo and Tom Price, Western Australia.

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: Development and delivery of a discussion paper and a 'Care in the Community' course for Enrolled Nurses

Date awarded: 26 June 2007

Clinical Guidelines for system change in secondary maternity hospitals

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

Grant received: \$33,000.00

Grant awarded to: Professor Cobie Rudd, Associate Professor Maureen Harris

Project aims:

- Actively participate in determining requirements for midwives in secondary maternity services for practice guidelines;
- Provide research evidence to support the development of multidisciplinary practice guidelines;
- Assist in the production of the guidelines;
- Critically review the developed guidelines;
- Participate in the research evaluation of the impact of implementation of the guidelines.

Date awarded: 28 May 2007

EN Registration Pathway Program

Funding agency: Nurses Board of Western Australia

Grant received: \$15,000

Grant awarded to: Professor Cobie Rudd

Project aim: development around the clinical component for the Enrolled Nurse Registration Pathway Program

Date awarded: 7 November 2007, completed January 2009.

EN Registration Pathway Program

Funding agency: Nurses Board of Western Australia

Grant received: \$15,000

Grant awarded to: Professor Cobie Rudd

Project aim: development around the clinical component for the Enrolled Nurse Registration Pathway Program

Date awarded: 7 November 2007, completed January 2009.

Management of aggressive behaviour

Funding agency: Osborne Division of General Practice Ltd

Grant amount applied for: \$5,500.00

Grant awarded to: Associate Professor Moira Sim

Project aim: Development of a practice kit which will assist general practices to establish a practice policy on the management of aggressive behaviour.

Date awarded: 20 June 2007, completed 29 June 2008. Research is continuing on website access.

Journal articles published and papers accepted or presented at conferences (includes those published in refereed proceedings or e-journals):

Journal articles:

Low back pain characteristics from undergraduate student to working nurse in Australia: A cross-sectional survey

Authors: Mitchell, T; O'Sullivan, P.B.; Burnett, A. F.; Straker, L. and Rudd C. (2008).

Journal: *International Journal of Nursing Studies*. doi: 10.1016/j.ijnurstu.2008.03.001.

Signs and symptoms of chronic hepatitis C

Authors: Sim, M., Cheng, W., Dore, G., & Beers, K. (2008).

Book: In Bradford, D., Dore, G., Grulich, A., Kidd, M., Hoy, J., McCoy, R., Matthews, G., Milch, A., & Strasser, S. (Eds.) (2008), HIV, viral hepatitis and STIs: A guide for primary care (Ch. 7, 71-79). Darlinghurst, NSW: Australian Society for HIV Medicine. ISBN 978-1-920773-50-2.

Falls, Depression and Antidepressants in Later Lifer: A Large Primary Care Appraisal.

Authors: Kerse, N., Flicker, L., Pfaff, J.J., Draper' Lautenschlager, N.T., Sim, M., Snowden, J. and Almeida, O.P. (2008).

Journal: *PLoS One*, 3 (6) 2423, 1-9.

The experience of faculty practice: Developing and evaluating a newly established program

Authors: Shuttleworth, C, Rudd, CJ, Smith, P, Combs, S & Wain, TD . (2008)

Journal: *Nurse Education Today*, 28, 702-710.

Does general practice Google?

Authors: Sim, M., Khong, E., & Jiwa, M. (2008).

Journal: *Australian Family Physician*, 37(6), 471-474.

Timely cancer diagnosis and management as a chronic condition: opportunities for primary care

Authors: Jiwa, M; Saunders, C.M.; Thompson, S.C.; Rosenwax, L.K.; Sargant, S.; Khong, E.L.; Halkett, G.K.B.; Sutherland, G.; Ee. H.C.; Packer, T.L.; Merriman, G. and Arnet. H.R. (2008)

Journal: *Medical Journal of Australia*, 189 (2), 78-82.

Benzodiazepine dependence: an update on management.

Authors: Khong, E., & Sim, M. (2008).

Journal: *BMJ Learning*. ISSN 1752-8526.

Technical publications:

Resource: **Community Partnerships Tool Box**

Authors: Strange, C, Rudd, C J, Maher, M, Shand, M, Buchanan, D (2008).

Publisher: School of Nursing, Midwifery and Postgraduate Medicine, ECU.

Resource: **Evaluation of the Falls Linkage Independence Program**

Authors: Khong E; Sim,M; Rosenberg, M; Wain, T; McRae, M (2008).

Conference presentations:

Keynote - Health Policy in the Changing World

Conference title: The Health and the Changing World International Conference, Bangkok, Thailand.

Conference date: 11-13 November 2008.

Presenter: Professor Cobie Rudd.

Closing Address

Conference title: The Health and the Changing World International Conference, Bangkok, Thailand.

Conference date: 11-13 November 2008.

Presenter: Professor Cobie Rudd.

Keynote: Health

Summit Title: WA 2020 Summit, 2008

Summit date: 5 May 2008.

Presenter: Professor Cobie Rudd.

Health Economics

Conference Title: UWA Symposium - Putting Health First.

Conference date: 22 August 2008.

Presenter: Professor Cobie Rudd.

Health in 2020

Conference Title: Curriculum Council - Health Studies Professional Development Forum.

Conference date: 13 August 2008.

Presenter: Professor Cobie Rudd.

Building sustainability: Health policy priorities, leadership and responsibilities

Conference Title: 2008 Vario Health Conference: Physical and Mental Wellness – Integrative Approaches to Health

Conference date: 1-2 December 2008

Presenter: Professor Cobie J Rudd:

Simulating a Coroner's Case to enhance the learning of health professionals - A case study

Conference Title: SimTech 2008.

Conference date: 8 - 11 September 2008.

Presenters: Associate Professor Christopher Churchouse, Kirsty Bayley, Professor Cobie Rudd.

Expanding the theory to practice gap using performance based simulation.

Conference Title: EDU-COM 2008.

Conference date: 19 – 21 November, 2008.

Presenter: Associate Professor Christopher Churchouse.

Developing a toolbox to support educators using performance actors in health scenario based learning

Conference Title: 13th National Nurse Educators Conference.

Conference date: 9-11 September 2008.

Presenters: Associate Professor Christopher Churchouse, Kirsty Bayley, and Professor Cobie Rudd.

Drug use and alcohol abuse, HIV and harm reduction

Conference Title: International short course in HIV and related issues.

Conference organisation: Australasian Society for HIV Medicine.

Conference date: 13 Sep 2008.

Presenter: Associate Professor Moira Sim.

Hepatitis C: Diagnosis and assessment.

Conference Title: Day Course in Hepatitis C for Opiate Dependency Pharmacotherapy Providers.

Conference organisation: Australasian Society for HIV Medicine.

Conference date: 19 Sep 2008.

Presenter: Associate Professor Moira Sim.

Managing aggressive behaviour in general practice

Conference Title: World Organisation of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians (WONCA) Asia Pacific Regional Conference combined with the Royal Australian College of General Practitioners 51st Annual Scientific Convention.

Conference date: 3 October 2008.

Presenter: Associate Professor Moira Sim.

Does General Practice Google? (Poster presentation)

Conference Title: World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians (WONCA) Asia Pacific Regional Conference combined with the Royal Australian College of General Practitioners 51st Annual Scientific Convention.

Conference date: 4 October 2008.

Presenter: Dr Eric Khong.

Screening, diagnosis and initial management of HCV infection in primary care

Conference organisation: Australian Society for HIV Medicine.

Conference Title: Day Course in Hepatitis C Medicine.

Conference date: 13 Sept 2008.

Presenter: Dr Eric Khong.

International Women's Day 08

Organisation: ECU.

Conference date: 10 March 2008.

Presenter: Professor Cobie Rudd.

Existing collaborations and external linkages (local, national, international)

A range of partnerships (N=22) 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. As well, Laerdal Pty Ltd, has funded SIRCH to develop healthcare simulation scenarios (co-badged), which are now promoted internationally.

Linked to healthcare simulation, a partnership has been established with the Western Australian Academy of Performing Arts (WAAPA) at ECU to progress a shared research agenda including:

- Requirements for actor training and production and design for healthcare simulation; and
- Virtual scenarios for mental health care.

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 Nursing Officer;
- Child and Adolescent Health; and
- Workforce.

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. These include:

- Collaboration with Marr Mooditj Foundation and Congress of Aboriginal and Torres Strait Islander Nurses to recruit and retain Indigenous nurses.
- Partnerships with Sir Charles Gairdner Hospital and Joondalup Health Campus to research successful change mechanisms to improve care for patients with alcohol use issues and implementation of a faculty practice program.
- Joint projects with Osborne General Practice Network Ltd to identify mechanisms to improve the skills of general practice staff to deal with aggressive behaviour and to manage obesity in children.

Community engagement

Professor Cobie Rudd was Keynote Speaker on Health, and Launch and Summary Session Attendee at Western Australia's State 2020 Summit. In conjunction with the Prime Minister's *Australia 2020* Summit, Labor Senator for Western Australia Ruth Webber convened the Perth 2020 Summit 28 April – 10 May 2008 (Western Australia's only 'local' 2020 Summit).

Professor Cobie Rudd launched the Community Partnership Toolbox (28 August 2008).

Professor Rudd gave a speech at the presentation of the Mental Health Good Outcomes Awards (7 October 2008).

During 2008, Professor Rudd and Associate Professor Churchouse consulted with industry, the health professions and community by way of simulation demonstrations.

Radio interviews:

- 21 October 2008 – Twin Cities radio: Happiness (A/Professor Moira Sim)

SIRCH member supervision of higher degree students

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PhD students

Student name and study level: Kesaraporn Wanajak – PhD.
 SIRCH supervisor: Professor Cobie Rudd (Principal Supervisor); Professor Anne Wilkinson (Co Supervisor).
 Research topic: Internet Addiction Among Thai High School Students.

Student name and study level: Jonathan Mould – PhD.
 SIRCH supervisor: Professor Cobie Rudd (Principal Supervisor).
 Research topic: Paediatric nursing: An investigation of the effect of paediatric nurse education and quality of children's nursing care in Western Australia.

Student name and study level: Amanda Swift – PhD.
 SIRCH supervisor: Professor Cobie Rudd (Principal Supervisor).
 Research topic: Ethical aspects surrounding the recruitment of international students.

Student name and study level: Vicki Cope – PhD.
 SIRCH supervisor: Associate Professor Christopher Churchouse (Co Supervisor).
 Research topic: Listening for a story: Portraits of humour and resilience in the healthcare setting.

Student Name and study level: Wendy Rosso – PhD.
 SIRCH supervisors: Dr Joyce Hendricks (Principal Supervisor), Associate Professor Christopher Churchouse (Co-Supervisor), Professor Cobie Rudd (Associate Supervisor).
 Research topic: An evaluation of Nurse Sponsorship Program in WA.

Student name and study level: Tessa Therklison.
 SIRCH Supervisor: Dr Trish Sherwood (Principal Supervisor); A/Prof Christopher Churchouse (Co Supervisor).
 Research topic: The experience of receiving ginger compresses in persons with osteoarthritis - a phenomenological study.

Master by Research students (N98 and 695)

Student name and study level: Brendon Bakes – Master by Research.
 SIRCH supervisor: Associate Professor Christopher Churchouse.
 Research topic: The lived experience of self-intermittent catheterisation in persons with spinal cord injury.

Student name and study level: Kirsty Bayley.
 SIRCH Supervisor: A/Prof Christopher Churchouse (Principal Supervisor); Dr

Joyce Hendricks (Co Supervisor).

Research topic: Using observational simulation to meet learning objectives.

