Centre for Clinical Governance Research in Health

Annual Report 2013

Strategic research into health policy, quality, culture, safety, systems, governance and leadership

UNSW
AUSTRALIA

Never Stand Still   Medicine   Centre for Clinical Governance Research

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Contents

Mission

1. To be an internationally-recognised reservoir of knowledge and expertise on clinical issues with a capacity to respond to requests for advice and consultation.

2. To undertake internationally-recognised interdisciplinary research and development projects on clinician-led approaches to organising and managing, across the full spectrum of care.

3. To provide a focal point for initiating and managing collaborative research and development projects on clinician-led approaches to the organisation and management of clinical practice involving partners drawn from other groups within UNSW Medicine, other departments within the University, Federal, State and Area health authorities and potential academic, policy and practitioner collaborators in other universities both in Australia and overseas.

4. To provide a supportive environment for developing research skills of early career health researchers from both clinical and social science disciplines.

5. To facilitate the development of education and training activities both within and outside the University in support of clinical governance.

6. To develop an international research reputation not simply in health, but also in the base disciplines from which Centre members are drawn: policy studies, discourse analysis, sociology, organisational behaviour, social theory, anthropology, psychology, health informatics and clinical studies.

Principles For Studies

The Centre's internationally-respected research studies focus on important science, have high translational value, and must satisfy the following principles:

- Utility and usefulness

- Highest quality results

- Feasible and realistic aims

- Propriety – to conduct our work ethically

- Accurate reporting and faithful interpretation of results

- Grounded in appropriate theory.

About The Centre for Clinical Governance Research in Health

The Centre for Clinical Governance Research in Health is an international research facility which forms part of the Australian Institute of Health Innovation in UNSW Medicine at UNSW Australia. It is a unique collaboration of research expertise examining systems improvement, information science, change, and healthcare quality and safety.

The Centre's mission is to investigate and provide new knowledge about policy, quality, culture, safety, systems, governance and leadership. Its constant focus is to be theoretically and methodologically progressive and industry relevant.

The Centre draws on the unique expertise of its assembled researchers and undertakes cross-disciplinary research with academic and industry collaborators. Researchers include staff members, visiting fellows and associates. Partners include other research groups, peak bodies, health jurisdictions and health service providers.

Staff secure research funding from national and international sources. They publish in a wide variety of leading international journals.

Collaborators

The Centre's national and international collaborators include:

National

- ACT Government Health Directorate
- Affinity Health Care
- Aged Care Quality Agency
- Australian Commission on Safety and Quality in Health Care (ACSQHC)
- Australian Council on Healthcare Standards (ACHS)
- Australian General Practice Accreditation Ltd (AGPAL)
- The Australian Health Care Reform Alliance
- Australian Health Insurance Association (AHIA)
- Australian Healthcare and Hospitals Association (AHHA)
- Australian Patient Safety Foundation (APSF)
- Australian Research Council (ARC)
- Australasian College of Health Service Management (ACHSM)
- Bupa Health Foundation
- Campbelltown Hospital, NSW
- Cancer Institute NSW (CINSW)
- Cancer Services at South Western Sydney Local Health Network
- Children's Health Queensland
- The Clinical Excellence Commission
- Department of Health and Ageing
- Department of Health Victoria
- Liverpool Hospital, NSW
- NSW Kids and Families, NSW Ministry of Health
- National Health and Medical Research Council (NHMRC)

- National Health Performance Authority (NHPA)
- Population Health and Health Services Research, NSW Ministry of Health
- Prince of Wales Hospital
- Queensland Health
- Ramsay Health Care
- Royal College of Pathologists of Australasia Quality Assurance Programs
- St Vincent's Hospital, Sydney
- The Sax Institute, NSW
- School of Public Health and Community Medicine, UNSW Australia
- South Australia Health
- Sydney Children's Hospital Network
- University of Melbourne
- University of Queensland
- University of Sydney
- University of Technology, Sydney
- Westmead Hospital

International

- Avedis Donabedian Institutute (FAD), Universitat Autonoma de Barcelona, Spain

- Canon Institute for Global Studies, Japan

- Erasmus University, Rotterdam, Holland

- Harvard Medical School, USA

- Health Services Management Centre, University of Birmingham, United Kingdom

- Imperial College, London, UK

- International Society for Quality in Health Care, ISQua, Ireland

- Kings College, London, UK

- The London School of Hygiene and Tropical Medicine, UK

- Medical Management Centre, Karolinska Institutet, Sweden

- National Health Service, United Kingdom (various NHS agencies)

- Newcastle University, United Kingdom

- Shanghai Municipal Health Bureau, People's Republic of China

- Society for the Study of Organising in Health Care, United Kingdom

- University College, London

- University Hospital of North Norway

- University of Edinburgh, United Kingdom

- University of Florida, USA

- University of Leeds, United Kingdom

- University of Manchester, United Kingdom

- University of Southampton, United Kingdom

- University of Southern Denmark

- World Health Organization, Kobe Centre, Japan

Steering Committee

Professor Denis Wakefield (Chair)
Associate Dean
UNSW Medicine

Professor Deborah Black
Associate Dean, Staff Development
Faculty of Health Sciences, University of Sydney

Professor Timothy Devinney
Professor of Strategy, Faculty of Business
University of Technology, Sydney (until 18th April 2013)

Professor George Rubin
Director Clinical Governance
South Eastern Illawarra Area Health Service

Honorary Associate Professor Brian Johnston
Principal, Brian Johnston Consulting (from 11th July 2013)

Professor Jeffrey Braithwaite
Director
Centre for Clinical Governance Research in Health

Associate Professor Julie Johnson
Deputy Director
Centre for Clinical Governance Research in Health

The Centre's Steering Committee met on three occasions during the year on: 18th April; 11th July; and the 14th November 2013. Committee members offered invaluable strategic advice to the Centre over the year. We are grateful for their support.

Director's Review

Professor Jeffrey Braithwaite

Being a health systems researcher in the modern era is a privilege. We in the Centre for Clinical Governance Research have the opportunity to work with skilled and committed colleagues and stakeholders, to conduct highly interesting research and to publish our work in international and national outlets such as books, articles and conference proceedings.

Our work is translational. I like to say we don't splice genes or try to cure cancer, as many medical researchers do. But in some respects, what we do is even *more* important. We seek to continuously improve the quality of care – and healthcare systems which deliver it – through investigations that illuminate the characteristics of healthcare and enable us to recommend ways of working more effectively.

We enjoyed considerable grant success in 2013. An NHMRC Partnership Grant of more than $2.5 million will support us to undertake CareTrack Kids, a landmark study which will, for the first time, reveal the appropriateness of the healthcare delivered to Australian children. This follows on from our CareTrack study, which found that 57% of Australian healthcare encounters are appropriate for 22 common, high- burden-of-disease conditions. Our partners in CareTrack Kids are the Bupa Health Foundation, NSW Kids and Families, Sydney Children's Hospitals Network, Children's Health Queensland, South Australia Health, the Clinical Excellence Commission and the Australian Commission on Safety and Quality in Health Care.

As previously reported, we were successful in our bid for an NHMRC Program Grant focusing on implementation science valued at $10.85 million over five years, which commenced in January 2014. There are six chief investigators: Professor Jeffrey Braithwaite, Professor Johanna Westbrook, Professor Enrico Coiera, Professor Bill Runciman, Professor Ric Day and Professor Ken Hillman.

The Centre's output continues to grow. We published 169 papers and were well represented with contributions to key national and international conferences. Five PhD completions covered an impressive range of work. An article published in *BMC Health* in May 2013 entitled 'Nurses' workarounds in acute healthcare settings: a scoping review' was selected as the Patient Safety Article of the Month in December 2013. It was led by Deborah Debono (who is currently completing her PhD part time with the Centre), and was co-authored by David Greenfield, Joanne Travaglia, Janet Long, Deborah Black, Julie Johnson and myself.

The Centre's success is a tribute to the energies, efforts and expertise of our great team. The research team's worth is underpinned by a very strong group of administrative and research support staff, in particular, Ms Sue Christian-Hayes, AIHI Administrative Manager and CCGR Business Manager, together with Ms Jackie Mullins, Ms Stephanie Dick, Ms Gina Lamprell, Dr Brette Blakely and Mrs Margaret Jackson.

The scope of the research we do – and the studies for which we seek funding – are limited only by our imagination. In this report, we provide a snapshot of some of the imaginative and interesting work we contributed in 2013.

2013 Highlights

Publications

62 peer reviewed journal articles

17 book chapters

2 books

47 peer reviewed and published conference abstracts

17 invited presentations

Highlights of our publications included:

Learning from Patient Stories (Jones and Bartlett) – a book of case studies by Associate Professor Julie Johnson.

Resilient Health Care, (Ashgate), published by Professor Jeffrey Braithwaite with Professors Erik Hollnagel in Denmark and Bob Wears in the United States.

Professor Braithwaite and Associate Professor Johnson are co-editing a book, along with Professors Russell Mannion from the University of Birmingham, UK, and Yukihiro Matsuyama from Canon Institute of Global Studies, Japan, on the impact of healthcare reform initiatives in 30 countries on quality and safety. It is scheduled to be published in 2014.

International work

The Centre was represented at:-

- The International Society for Quality in Health Care [ISQua], October 2013, Edinburgh, Scotland: Professor Jeffrey Braithwaite, Honorary Associate Professor Brian Johnston, Dr David Greenfield and Associate Professor Julie Johnson, Drs Jacqueline Milne, Anne Hogden and Joanne Travaglia participated in many parts of the program including chairing sessions, facilitating workshops, making oral presentations and discussing our posters.

- Accreditation Canada Conference, Ottawa: Professor Braithwaite was an invited guest speaker and presenter.

- Resilience Network Workshop, Denmark, August 2013: Professor Braithwaite was an invited guest speaker and presenter.

- Imperial College, London, London School of Hygiene and Tropical Medicine, and Durham University, October 2013: Professor Braithwaite delivered lectures.

- The International Society for Quality in Health Care Inc [ISQua], October 2013: Dr David Greenfield became an ISQua Fellow.

- JACIE Executive Briefing and Research Discussion, University of Sheffield (Sheffield, England): Dr David Greenfield presented.
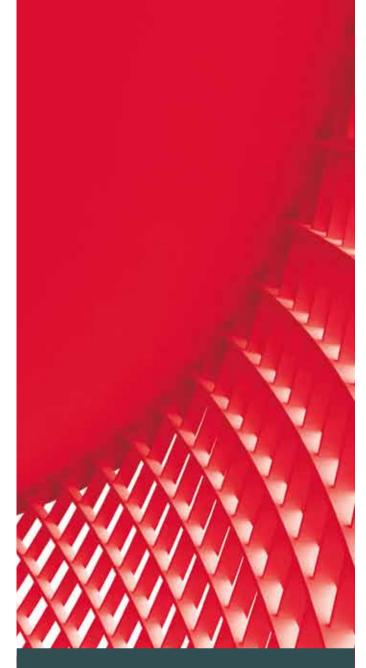
National contributions

Highlights included:-

- Professor Braithwaite and Dr Robyn Clay-Williams won the best paper award at the Royal Australasian College of Medical Administrators Conference at the Gold Coast in September, 2013. Dr Wendy Lipworth was selected as a finalist in "Best Theory-to-Practice Paper Award". Conferences attended by Centre staff include Dr Wendy Lipworth at The Australasian Association of Bioethics and Health Law Conference and the Global Health and the Law Conference, Sydney Law School.

- Dr Jacqueline Milne presented at the Building the Future: Quality, Capacity, Creativity, 18th Prevocational Medical Education Forum (Adelaide, Australia).

- Dr Virginia Mumford presented at the 35th Australian Conference of Health Economists, Australian Health Economics Society (Canberra, Australia).

- Drs Hinchcliff, Mumford and Greenfield all presented at the 2013 Primary Health Care Research Conference: Allies for Better Primary Health Care, (Sydney, Australia).

- Dr Greenfield was a member of teams who presented at the Managing on the Edge, 27th Australia and New Zealand Academy of Management Conference (Hobart, Australia), and the Professional Development of Health Professional Educators, Australian and New Zealand Association of Health Professional Educators (Melbourne, Australia).

- Dr Anne Hogden presented at the Ageing and Neurodegeneration Meeting, Neurological Research Institute of Australia (Sydney, Australia).

- Professor Jeffrey Braithwaite and Drs David Greenfield and Reece Hinchcliff made presentations to Australian Council on Healthcare Standards (Sydney, Australia).

- Dr David Greenfield contributed to a presentation to the Centre for Work, Organisation & Wellbeing Seminar, Griffith Business School, Griffith University.

Selected grants

- NHMRC Partnership Grant with partners Bupa Health Foundation, NSW Kids and Families, Sydney Children's Hospitals Network, Children's Health Queensland, South Australia Health, the Clinical Excellence Commission and the Australian Commission on Safety and Quality in Health Care on the Appropriateness of healthcare delivered to Australian Children: CareTrack Kids. [Investigators CIs Professor Jeffrey Braithwaite, Professor Adam Jaffe, Professor Les White, Professor Christopher Cowell and Professor Mark Harris, 2013-2016] for $2,530,078. [$1,263,318 NHMRC contribution; $880,000 cash contribution and $386,760 in kind partners' contributions].

- Department of Health and Ageing, Strategic Research Development Funds for $98,901 for 2013 [Professor Jeffrey Braithwaite, Dr David Greenfield, Peter Hibbert].

- UNSW Health Service Alliance Preliminary Evaluation for $10,000 [Associate Professor Julie Johnson, Dr David Greenfield, Dr Adam Dunn].

- Clinical Excellence Commission for an Evaluation of In Safe Hands: Acquisition of Baseline Data for $29,942 [Associate Professor Julie Johnson, Dr Robyn Clay-Williams, Deborah Debono].

- Clinical Excellence Commission for an Evaluation of In Safe Hands at Orange Health Service for $21,977 [Associate Professor Julie Johnson, Dr Robyn Clay-Williams, Dr Jennifer Plumb].

- The National Health Performance Authority Evaluation for $89,333 [Professor Jeffrey Braithwaite, Peter Hibbert, Natalie Hannaford and Janet Long].
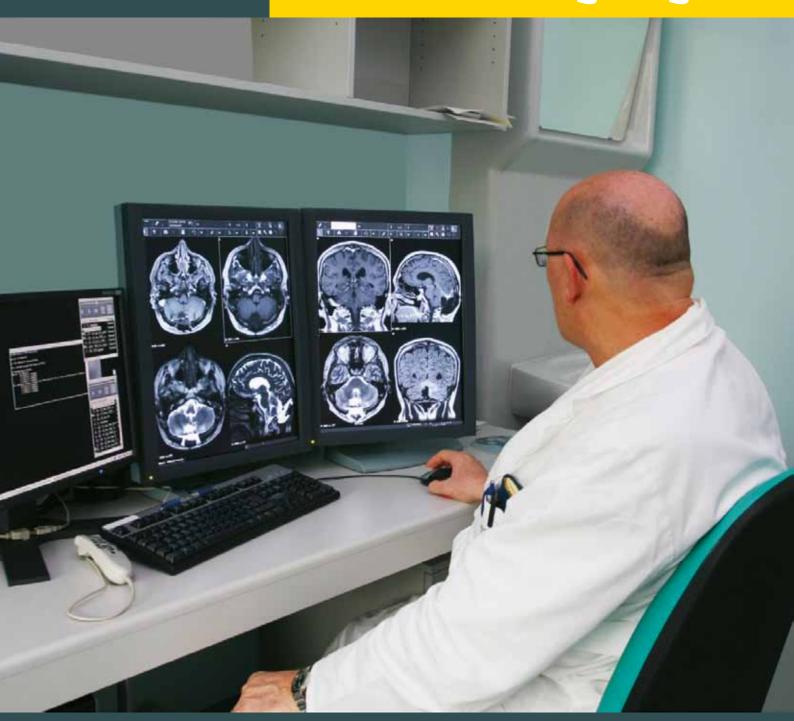
Visitors

- Our ARC ACCREDIT Linkage project's International Advisory Committee met in Sydney in July this year. The Committee consists of Professors Jeffrey Braithwaite and Johanna Westbrook, Dr David Greenfield, Professor Rosa Sunol from the Universitat Autonoma de Barcelona, Professor Charles Shaw from the United Kingdom and Professor Catherine Pope from the University of Southampton, and partner organisations, Australian Council on Healthcare Standards, Australian General Practice Accreditation Limited, Aged Care and Standards Accreditation Agency, Australian Commission on Safety and Quality in Health Care and the Clinical Excellence Commission.

- In conjunction with other centres from AIHI, we hosted a half day symposium on 'Health Systems Research in Europe: An update' on 1st August, where our international members presented: Large scale quality and safety studies in Europe (Professor Rosa Sunol); International developments and challenges facing accreditation programs (Professor Charles Shaw); and Looking at practice close up: What does ethnography tell us when we scrutinise healthcare (re)organisation and delivery? (Professor Catherine Pope). The visit enabled the international members, research team and partner investigators to work together with the project data and results to date.

- We hosted international visitors throughout the year. These included Professor Tor Ingebrigtsen, Chief Executive Officer from the University Hospital of North Norway and a Neurosurgeon, conducting health services research projects. Professor John Øvretveit, Director of Research, The Medical Management Centre, Karolinska Institutet, Sweden, is a regular visitor. Professor Øvretveit ran several workshops for internal and external researchers, which were well attended.

- Professor Roland Bal, Professor of Healthcare Governance from the Erasmus University, Rotterdam, visited during June and July and we hosted Professor Yukihiro Matsuyama, Research Director from the Canon Institute for Global Studies.

PhD completions

- **Dr Anne Hogden,** What influences patient-centred decision-making in motor neurone disease care? A study of stakeholder perspectives.

- **Dr Eilean Watson**, Curriculum mapping in medicine: How is it used

- **Dr David Pereira**, The association between team characteristics, performance and human resource management (HRM) in rehabilitation services

- **Dr Jennifer Plumb**, Professional conceptualisation and accomplishment of patient safety in mental healthcare

- **Dr Evelyn Harrison-Varga**, The Long-Term Interaction of Private Health Insurance Predictors with Commonwealth Private Health Sector Policy

Accreditation

The Centre has had a long-standing interest in researching accreditation programs and healthcare standards. In 2013, the Centre has been involved in two research projects on this topic.

Has accreditation improved the quality of care?

The Accreditation Collaborative for the Conduct of Research, Evaluation and Designated Investigations through Teamwork (ACCREDIT) Project is a collaboration which commenced in July 2010 between researchers at UNSW, and The Australian Council on Healthcare Standards, Australian General Practice Accreditation Limited, Australian Aged Care Quality Agency (previously the Aged Care Standards and Accreditation Agency), the Australian Commission on Safety and Quality in Health Care and the New South Wales Clinical Excellence Commission. This project is shedding light on the challenges facing accreditation agencies and their stakeholders in their efforts to advance the sustainability and credibility of the programs.

One important finding is the identification of four factors as critical enablers of effective implementation of accreditation programs: the accreditation program is collaborative, valid and uses relevant standards; accreditation is favourably received by health professionals; healthcare organisations are capable of embracing accreditation; and accreditation is appropriately aligned with other regulatory initiatives and supported by relevant incentives.

Another significant research finding this year concerns the evidence that the benefits of accreditation justify the costs. The research demonstrated a lack of formal economic appraisal on the issue. There is a lack of a clear-cut relationship between accreditation and improved safety and quality of care outcomes. It is not possible to demonstrate causality or the overall impact of accreditation, particularly due to problems in isolating accreditation from other safety and quality measures.

Selected Publications

Greenfield D, Pawsey M, Braithwaite J. Accreditation: A global regulatory mechanism to promote quality and safety. In: Sollecito W, **Johnson J**, editors. *Continuous quality improvement in health care: Theory, implementations and applications, 4th edition*. New York, United States of America: Jones and Bartlett Learning. 2013; 513-31.

Mumford V, Forde K, **Greenfield D, Hinchcliff R, Braithwaite, J**. Health services accreditation: what is the evidence that the benefits justify the costs?, *International Journal for Quality in Health Care*. 2013; 25(5):606-620.

Hinchcliff R, Greenfield D, Westbrook JI, Pawsey M, **Mumford V, Braithwaite J**. Stakeholder perspectives on implementing accreditation programs: A qualitative study of enabling factors. *BMC Health Services Research*. 2013; 13(1):437.

Greenfield D, Hinchcliff R, Pawsey M, Westbrook J, **Braithwaite J**. The public disclosure of accreditation information in Australia: Stakeholder perceptions of opportunities and challenges. *Health Policy*. 2013; 113(1-2):151-9.

Mumford V, Greenfield D, Hinchcliff R, Moldovan M, Forde K, Westbrook JI, **Braithwaite J**, et al. Economic evaluation of Australian acute care accreditation (ACCREDIT-CBA [Acute]): Study protocol for a mixed-method research project. *BMJ Open*. 2013; 3(2):pii: e002381.

Greenfield D, Pawsey M, Naylor J, **Braithwaite J**. Researching the reliability of accreditation survey teams: Lessons learnt when things went awry. *Health Information Management Journal*. 2013; 42(1):4-10.

Has accreditation improved organisational systems?

The Centre is engaged in a collaboration which commenced in 2012 between researchers at UNSW and Griffith University, and the Board and staff of Australian Council on Healthcare Standards. This project is investigating organisational systems that impact on patient safety and care, and how these can be improved. The links between accreditation system process ratings and objective organisational and clinical performance outcomes are a focus of the research.

A significant finding has been to contribute an understanding that healthcare organisations that pursue high performing human resource management systems use participation in an accreditation program as a positive opportunity. The accreditation assessment is a tool by which to reflect and obtain feedback so as to maintain or improve the management of staff and delivery of care.

Selected Outputs

Greenfield D, Kellner A, Townsend K, Wilkinson A, Lawrence, SA. Health service accreditation reinforces a mindset of high performance human resource management: lessons from an Australian study, *International Journal for Quality in Health Care*, accepted 17/03/14.

Kellner A, Townsend K, Wilkinson A, **Greenfield D**, Lawrence SA. How does hospital accreditation assist high performance in human resource management practice? *27th Australia and New Zealand Academy of Management Conference - Managing on the edge*; 4-6 December; Tasmania, Australia. 2013.

Lawrence SA, **Greenfield D**, Kellner A, Townsend K, Wilkinson A. Change in HRM processes and clinical performance in Australian hospitals: The influence of accreditation as a motivator. *27th Australia and New Zealand Academy of Management Conference - Managing on the edge*; 4-6 December; Tasmania, Australia. 2013.

Human Factors

Improving team skills leads to ongoing benefits

Under the auspices of a Capacity Building Infrastructure Grant (CBIG) from NSW Health, we developed and tested a modularised version of our Crew Resource Management (CRM) team-skills training course for doctors, nurses and midwives working in complex, time-critical areas at Hunter New England Health. Led by Dr Robyn Clay-Williams, the training was specifically adapted for the healthcare environment, and included instruction in practical skills in communication, decision-making, task management, leadership, and situational awareness.

Evaluation of the modularised training was conducted with doctors and nurses in the ACT Health Service. We found that CRM training, when delivered in a modular format, has positive outcomes. Following the training, some respondents overcame workplace barriers to attempt to change negative workplace behaviour.. This progress affords cautious optimism for the potential for modular CRM training to benefit groups of interprofessional health staff.

Multidisciplinary Crew Resource Management (CRM)

Funding Source: Capacity Building Infrastructure Grant, New South Wales Health

Investigators: **Robyn Clay-Williams, Jeffrey Braithwaite**

Duration: May 2009 to June 2013

Selected Publications

Clay-Williams R, Braithwaite J. Determination of healthcare teamwork training competencies: A Delphi study. *International Journal for Quality in Healthcare.* 2009; 21(6):433–40.

Braithwaite J, Clay-Williams R. Mandating healthcare by creeps and jerks. *International Journal for Quality in Healthcare*. 2012; 24(3):197–9.

Clay-Williams R, McIntosh C, Kerridge R, **Braithwaite J**. Classroom and simulation team training: A randomised controlled trial. *International Journal for Quality in Health Care*. 2013; 25(3): 314-321.

Clay-Williams R, Greenfield D, Stone J, **Braithwaite J**. On a wing and a prayer: An assessment of modularized Crew Resource Management training for health care professionals. *Journal of Continuing Education in the Health Professions*. 2013; (Accepted 11 October).

Clay-Williams R. Military rather than civil aviation holds the answers for safer healthcare. *British Medical Journal*. 2013; 347:f5570.

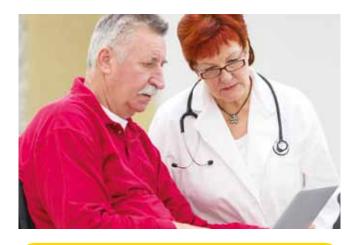# Interprofessional Practice and Collaboration

Enhancing collaboration to improve patient-centred care

Decision-making for patient-centred care extends interprofessional collaborative practice between health professionals to include the patient and family members. Patient-centred care results when health professionals work closely with patients and families to make choices that respect patients' values, circumstances and healthcare needs.

While patient-centred care and decision-making have broad support in the healthcare literature, they are not easily enacted. We examined decision-making in the context of a terminal and rapidly progressive health condition, amyotrophic lateral sclerosis (ALS). Perspectives of three stakeholder groups (patients, family members and health professionals) were sought, to identify barriers and facilitators to patient-centred decision- making, and ways to improve decision processes in ALS interprofessional care.

Comparison of stakeholder perspectives revealed six key themes of ALS decision-making. These were: the decision-making process; patient-centred focus; timing and planning; information sources; engagement with specialised ALS services; and access to non-specialised services. A model, embedded in the specialised ALS multidisciplinary clinic, was derived to guide patient decision-making. The model is cyclic, with four stages: 'Participant Engagement'; 'Option Information'; 'Option Deliberation'; and 'Decision Implementation'.

Patient and family engagement in decision-making is tested by the dynamic nature of ALS, and patient and family distress. Our model optimises patient-centred decision-making, by incorporating patients' cyclic decision-making patterns, and facilitating carer inclusion in decision processes.

Selected Publications

Hogden A, Greenfield D, Nugus P, Kiernan MC. Engaging in patient decision-making in amyotrophic lateral sclerosis multidisciplinary care: the views of health professionals. *Patient Preference and Adherence*. 2012; 6, 691-701.

Hogden A, Greenfield D, Nugus P, Kiernan MC. What influences patient decision-making in amyotrophic lateral sclerosis multidisciplinary care? A study of patient perspectives. *Patient Preference and Adherence*. 2012; 2,829-838.

Hogden A, Greenfield D, Nugus P, Kiernan M. What are the roles of carers in decision-making for amyotrophic lateral sclerosis multidisciplinary care? *Patient Preference and Adherence*. 2013; 7:171-81.

Hogden A, Greenfield D, Nugus P, Kiernan MC. Development of model to guide decision-making in amyotrophic lateral sclerosis multidisciplinary care. *Health Expectations*. 2013; (Accepted November).

Drug Development

Improving clinical quality in international drug development

As part of its program of research into patient safety, the Centre is supporting work into Australian and international drug development. This project is being conducted by Dr Wendy Lipworth and Professor Richard Day. Dr Lipworth is the recipient of a National Health and Medical Research Council Postdoctoral (Training) Fellowship.

This work extends the Centre's safety and quality research, asking questions about the quality of information generated for clinical use, and the ways this information is used in decisions about registration, subsidisation and clinical practice guidelines. We contend that clinical safety and quality are inevitably compromised by problems with the ways medicines are developed, tested, regulated and subsidised.

This research is now in its final year. Phase 1 analysed a series of drug development case studies, to identify trends requiring further examination. This analysis showed that the key issues are the effects of commercial interests on drug development, the effects of changing scientific paradigms, and the effects of subsidisation processes.

Phase 2 – in-depth interviews with representation from key stakeholder groups – has been completed. Analysis has focused on the values of pharmaceutical companies' employees, to better understand the moral and socio-political implications of commercial drug development, as well as on broader trends influencing Australian drug development.

Selected Publications

Ghinea N, **Lipworth W**, Little M, Kerridge I, Day R. Overcoming entrenched disagreements. The case of misoprostol for post-partum haemorrhage. *Developing World Bioethics*. 2013; (Accepted 17 June).

Ghinea N, **Lipworth W I**, Little M, Day R. Ethics and Evidence in Medical Debates: The Case of Recombinant Activated Factor VII. *Hastings Center Report*. 2013; (Accepted 15 November).

Lipworth W, Kerridge I, Doran E, Day R. Challenges to pharmaceutical policymaking: lessons from Australia's National Medicines Policy. *Australian Health Review*. 2014; 38(2): 160-168.

Lipworth W, Kerridge I. Why drug shortages are an ethical issue. *Australasian Medical Journal*. 2013; 6(11): 556–559.

Lipworth W, Little M. Deriving and critiquing an empirically-based framework for pharmaceutical ethics. *American Journal of Bioethics (AJOB) Primary Research*. 2013; (DOI:10.1080/21507716.2013.812690).

Lipworth W, Montgomery K, Little M. How pharmaceutical industry employees manage competing moral commitments. *Journal of Bioethical Inquiry*. 2013; (DOI: 10.1007/s11673-013-9449-4).

Lipworth W, Kerridge I, Day R. Formulating an ethics agenda for drug development, regulation and utilization. *Therapeutic Innovation and Regulatory Science.* 2013; 47(1):46-9.

Lipworth W, Ho K, Kerridge I, Day R. Drug policy at the margins: The case of growth hormone replacement for adults with severe growth hormone deficiency. *Medical Journal of Australia*. 2012; 197(4):204–5.

Lipworth W, Kerridge I, Day R. Time for the Pharmaceutical Benefits Advisory Committee to set its own agenda. *Medical Journal of Australia*. 2012; 196(6):374–5.

Lipworth W, Kerridge I, Day R. Wrong questions, wrong answers? Are we getting the drugs we need? *Clinical Pharmacology & Therapeutics.* 2012; 91(3):367–9.

Lipworth W, Kerridge I, Brett J, Day R. How clinical and research failures lead to suboptimal prescribing: The example of chronic gout. *British Medical Journal*. 2012; 343:d7459.

Management and Leadership Studies

Developing proactive leaders for resilient healthcare.

Clinician-managers have been drawn into leadership positions over the last three decades. A research program led by Investigators Jeffrey Braithwaite, Mary Westbrook and Robyn Clay-Williams examines their roles, behaviours and activities *in situ*.

Our work on clinical leadership continued this year, extending into two areas: clinical leadership and Information Technology (IT), and medical leadership and system resilience. Led by visiting Norwegian Professor Tor Ingebrigtsen, we completed a systematic review examining evidence of associations between clinical leadership and successful IT adoption in healthcare organisations.

We found important associations between the attributes of clinical leaders and IT adoption. Clinical leaders who have technical informatics skills and prior experience with IT project management are likely to develop a vision that comprises a long-term commitment to the use of IT. Leaders who possess such a vision believe in the value of IT, are motivated to adopt it, and can maintain confidence and stability through the adversities that IT adoptions often entail. This leads to proactive leadership behaviours and partnerships with IT professionals that are associated with successful organisational and clinical outcomes.

We also explored the nature of healthcare as a complex adaptive system, contributing three chapters to the new and seminal book *Resilient Health Care.* The book, co-edited by Professor Jeffrey Braithwaite, discusses the importance of studying how health systems work rather than just where they fail. It juxtaposes two views on safety: Safety-I and Safety-II. Safety-I is the traditional way of thinking that looks for things that go wrong, and attempts to eliminate all adverse events. Safety-II presents a more proactive approach that leverages what already works in the healthcare system to improve performance by increasing the proportion of things that go right.

A longitudinal program to conceptualise, empiricise and evaluate clinician-managers' roles, behaviours and activities

Funding Source: University of NSW

Investigators: **Jeffrey Braithwaite, Mary Westbrook, Robyn Clay-Williams**

Duration: 1996 to present

Selected Publications

Braithwaite J, Finnegan T, Graham EM, Degeling PJ, Hindle D, **Westbrook MT**. How important are safety and quality for clinician-managers? Qualitative evidence from triangulated studies. *Clinical Governance: an International Journal*. 2004; 9(1):34-41.

Braithwaite J, Westbrook MT, Mallock NA. How subordinates exercise pressure on their managers: Anglo and Confucian - "Asian comparisons". *Journal of Managerial Psychology*. 2008; 23(1): 40-53.

Braithwaite J, Westbrook MT. Time spent by health managers in two cultures on work pursuits: real time, ideal time and activities' importance. *International Journal of Health Planning and Management*. 2011; 26 (1), 56-69.

Braithwaite J, Clay-Williams R, Nugus P, Plumb J. Health care as a complex adaptive system. In: Hollnagel E, **Braithwaite J**, Wears R, editors. *Resilient Health Care*. Surrey, UK: Ashgate Publishing Limited; 2013.

Clay-Williams R. Restructuring and the resilient organisation: implications for health care. In: Hollnagel E, **Braithwaite J**, Wears R, editors. *Resilient Health Care*. Surrey, UK: Ashgate Publishing Limited; 2013.

Ingebrigtsen T, Georgiou A, **Clay-Williams R**, Magrabi F, Hordern A, Prgomet M, Li Y, Westbrook JT, **Braithwaite J**. The impact of clinical leadership on health information technology adoption: Systematic review. *International Journal of Medical Informatics*. 2014; 83(6): 393-405.

Health Systems Improvement

Studying how safety and quality initiatives work in the real world

In order to improve health systems, we need to understand the factors that influence how clinicians behave in everyday practice. This year our doctoral students examined what we can learn from the dynamics of teamwork and everyday work activities in real healthcare settings to inform wider initiatives to improve safety and quality.

Deborah Debono's doctoral research investigates the influence of context, culture, technology, and relationships on clinicians' practice. The study explores how electronic management systems (eMMS) are used in clinical practice; how staff develop solutions (or workarounds) to the workflow blockages such systems can cause; and how nurses individually and collectively conceptualise, rationalise and enact these workarounds. A better understanding of the factors that affect the enactment and conceptualisation of workarounds will help those planning and implementing systems to assist clinicians deliver safe and effective care to their patients.

In her PhD study, Jennifer Plumb also argues that a context-sensitive understanding of the everyday work of frontline professionals must underpin any efforts to improve the safety and quality of healthcare. Rather than focusing on what happens when things go wrong, Jennifer's study instead teases out what happens in mental healthcare to enable things to go right. She has closely observed the informal strategies staff in two multidisciplinary teams use daily which help to produce safe care and create resilience against adverse events. She has shown how these improvised techniques intersect with formalised, officially-sanctioned mechanisms of risk management. As a result of the research, she suggests that policy priorities should be reoriented away from risk management activity for its own sake towards personalisation and safety creation. Risk reduction could thereby emerge as a side effect of mental health services' interventions rather than constituting their central goal.

Focusing more directly on teamwork dynamics, David Pereira's research assessed team characteristics in rehabilitation services to contribute explanations for Human Resource Management's (HRM) influence on healthcare performance. This cross-sectional study involved rehabilitation teams from seven public hospitals and used both quantitative and qualitative methods. A survey collected input on clinician teamwork and job satisfaction. Clinical indicators provided process and outcome measures of performance. Organisational and service-level HRM was assessed through interviews and focus groups with clinicians and managers. The findings suggest that clinician job satisfaction and clinical performance may be improved by tailoring HRM policies and practices to complement teamwork.

Selected Outputs

Debono D, Braithwaite J. How everyday functioning in acute care really works: the case of nurses' workarounds [abstract]. *The Resilient Health Care Net - Summer Meeting.* August 26-28 2013; Middlefart, Denmark.

Debono DS, Greenfield D, Travaglia JF, Long JC, Black D, **Johnson J, Braithwaite J**. Nurses' workarounds in acute healthcare settings: A scoping review *BMC Health Services Research.* 2013; 13:175 (www.biomedcentral.com/1472-6963/13/175)

Pereira D, Greenfield D, Ranmuthugala G, Braithwaite J. The role and potential of human resources departments in healthcare organisations.[abstract] *International Society for Quality in Healthcare's (ISQua) 30th International Conference 'Quality and safety in population health and healthcare'* Edinburgh, United Kingdom; October 13-16, 2013.

Braithwaite J, Clay-Williams R, Nugus P, Plumb J. Healthcare as a Complex Adaptive System, chapter in E. Hollnagel, **J. Braithwaite,** R. Wears (eds.) *Resilient Health Care*, Farnham: Ashgate. 2013; p.57-73.

Lourey C, **Plumb, J**, Mills A. *A Contributing Life: National report card on mental health and suicide prevention 2013.* Sydney: Australian Government, National Mental Health Commission.

Duckett S, **Plumb J**. and **Braithwaite J**. Health reform in Australia. *ISQua's 30th International Conference: Pre-conference workshop on reform on 30 countries*, Edinburgh, Scotland, 13-16 October 2013.

Braithwaite J, **Plumb J.** Three attributes of everyday functioning: social organization, cultural features and network characteristics. *The Resilient Health Care Net - Summer Meeting.* August 26-28 2013; Middlefart, Denmark.

Healthcare Microsystems

A Centre of Excellence to improve primary healthcare

The Australian Primary Healthcare Research Institute (APHCRI) Centre of Excellence (CRE) in Primary Healthcare Microsystems was established in early 2011 to address primary healthcare quality, governance, performance, and sustainability issues identified within the national health reform agenda. This CRE, incorporating the clinical microsystem approach, is investigating improved models in regional governance and eHealth, effective multi-disciplinary teamwork, and primary care performance and accountability.

The research streams have been chosen for their critical importance in areas of national significance and current government reform, and their suitability in meeting the need for strong research to guide decision-makers, clinicians and communities. The CRE's overarching research aim is to support Australian primary care as it moves from a series of disparate sectors to an integrated system, able to reliably engage in the reform challenges ahead. The research program will apply and evaluate a clinical microsystems approach across the two research streams and we will be able to demonstrate the impact of an internationally-successful quality improvement methodology within Australian primary care. This CRE is a collaboration between the University of Queensland, Flinders University, University of NSW, Greater Green Triangle University Department of Rural Health, Deakin University, Mater Health Services, and other stakeholders. The CRE works closely with several key partner organisations such the Australian Commission on Safety and Quality in Healthcare, Australian General Practice Accreditation Limited, Australian Association of Practice Managers, Australian Practice Nurses Association, Australian Primary Health Care Research Institute, Chronic Illness Alliance, Improvement Foundation Australia, Mater Medical Research Institute, Royal Australian College of General Practitioners, and the Department of Health and Ageing.

The research team comprises expertise in general practice, nursing, allied health, and other specialities. We use implementation research methodology, interaction models of research utilisation and a linkage and exchange model which includes extensive and ongoing interactions between the CRE team and members of our National and International Advisory Committees, our partner organisations and other relevant stakeholders. This allows our partners, who are predominantly the end-users of our research, to be closely involved in the research process and to alert our CRE of any important issues throughout the duration of the research project. It also allows progressive 'road testing' of processes, findings and recommendations at each research stage, enabling research findings to be implemented almost immediately.

During 2013, we presented the work of the CRE at several national conferences in Australia, such as the annual PHCRIS Conference, and internationally at the annual Microsystems Festival in Jonkoping Sweden. CRE researcher and AIHI higher research candidate Anne Sinclair is conducting her PhD research on the role of the learning organisation in general practice microsystems. We anticipate the findings of her research to be available at the end of 2014.

Selected Outputs

Elnour AA, Ford D, Clark S, Morgan M, **Johnson J**, Dunbar J. Improving patient safety in Australian primary care. Poster Presentation. *10th Annual International Clinical Microsystem Festival – Scientific Day*. Jonkoping, Sweden. 1 March 2013.

Sinclair A, Johnson J, Travaglia J, Fuller J. The Primary Healthcare Microsystem as a Learning Organisation. Poster Presentation. *10th Annual International Clinical Microsystem Festival – Scientific Day*. Jonkoping, Sweden. 1 March 2013.

Elnour AA, Ford D, Clark S, **Johnson J**, Dunbar J. Is there an association between quality and safety in Australia's primary care? *GP12*, Brisbane. 25-27 October 2013.

Metro-Regional Intellectual Disability Network

Evaluating collaboration to improve healthcare services for this disadvantaged population

The Metro-Regional Intellectual Disability Network (MRID.net) is a partnership model for improving healthcare for people with intellectual disability in regional and remote areas of NSW. It aims to develop an innovative partnership model between NSW Health and the Ageing, Disability and Home Care (ADHC) Department of Family and Community Services NSW to improve access to specialist multi-disciplinary health services that are available in metropolitan areas for people with intellectual disability and their carers living in regional and rural areas of NSW.

MRID.net used the National Broadband Network (NBN), where available, or other broadband networks to improve the existing healthcare services for this disadvantaged population. It offers video consultations, training for health professionals and support for local health and disability systems. The pilot project engaged the community in designing, implementing and evaluating the program to ensure that it met the needs of client families and carers. Information systems are used locally to coordinate care, and also to evaluate and develop the program.

The Centre is evaluating the project, and its findings will inform larger-scale programs elsewhere to improve the access to specialised clinical services for people with intellectual disability. The ongoing involvement of the Evaluation Team has taught the MRID project team more about evaluation and led them to understand different models of evaluation including summative, formative, and developmental evaluation. They now discuss and plan the use of different evaluative tools (needs assessment, focus groups, surveys, open-space technology, process mapping) in the clinic setting, school transition clinic setting, and for the various workshops and forums held throughout the year. This is a unique aspect of the project with implications for their work that goes beyond this project.

Collaborators in this project are representatives from the South Eastern Sydney Local Health District; Illawarra Shoalhaven LHD (ISLHD); NSW Council of Intellectual Disability; Agency for Clinical Innovation Intellectual Disability Network (ACI ID) Network; Chair, Intellectual Disability Mental Health, UNSW; Chair, Child and Adolescent Psychiatry, UNSW; Centre for Clinical Governance Research in Health, UNSW; Ageing, Disability and Home Care (ADHC); Department of Education and Communities; Centre for Oral Health Strategies; and The Disability Trust.

Results from the evaluation will be presented at a workshop at the PHCRIS annual Conference in Canberra in July 2014 and also at the ISQua Annual Meeting in October 2014.

Evaluating a collaborative support project

Funding Source: NSW Health

Investigators: Robert Leitner, Rhoshel Lenroot, Rajiv Singh, **Julie K Johnson**

Duration: 1 January 2011 – March 2013

Conference Presentations

Johnson J, **Debono D**, Kim J, Leitner R, Florio T, **Milne J**. Asking stakeholders what they need: shaping service delivery for people with intellectual disability and mental health problems. *2013 Primary Healthcare Research Conference*. Sydney, 12 July 2013.

Johnson J. Evaluating New Initiatives. *Intellectual Disability Mental Health Forum*. St. George Hospital, Kogarah, NSW. 31 May 2013.

Johnson J, Debono D, Milne J. Developmental evaluation: more than post-assessment of primary health programs. *2014 Primary Health Care Research Conference*. Canberra, ACT. 23 July 2014. Accepted for workshop presentation.

Milne J, Funke A, Leitner R, **Johnson J**. Co-Creating A Path Forward: Testing The Method Of Open Space Technology With A Vulnerable Population. *ISQua's 31st International Conference*. Windsor Barra Hotel, Rio de Janeiro, Brazil. 8 October 2014. Accepted for an oral presentation.

In Safe Hands

Using microsystems theory to improve patient care in hospital wards

In Safe Hands (ISH) is a team-based, patient centred model of care developed by the Clinical Excellence Commission (CEC) to improve performance of teams on the inpatient ward. ISH requires comprehensive changes to the ward's culture, work practices and team functioning. Redesigning ward rounds is at the heart of ISH, in which staff employ a Structured Interdisciplinary Bedside Round (SIBR) at approximately the same time daily. Medical, nursing, and allied health staff seek input from the patient/family, and set a daily plan and goals for the patient.

The aim of ISH is to replicate high-reliability patient care teams and to deliver excellent care as standard to all patients across the NSW public health system. Orange Health Service (OHS) was the first hospital to implement ISH in NSW, with rollout occurring for 21 sites across the state.

AIHI conducted an evaluation of implementation of ISH at OHS to:

1. Assess the impact of the ISH program on team functioning, staff experience and job satisfaction

2. Identify lessons learned from the process of implementing ISH.

The evaluation has been extended to include wards at Prince of Wales Hospital, St Vincent's Hospital, and Hornsby Hospital. The evaluation methods include observation of ward rounds and semi-structured interviews with the leadership team responsible for the implementation of ISH and the front line clinical staff (doctors, nurses, allied health, managers and ancillary staff) whose daily work was directly affected by the redesign.

An evaluation of a complex social intervention to build high reliability patient care teams

Selected Publications

Johnson J, Clay-Williams R, Plumb J. ISBN 978-0-7334-3440-2. Report of the Part II Evaluation of the Acute Medical Unit at Orange Health Service. Australian Institute of Health Innovation. 2013.

Johnson J, Clay-Williams R, Plumb J, Hawke C, Dalton H, MacKender D, Shannon G. An Evaluation of a Complex Social Intervention to Build High Reliability Patient Care Teams. *International Forum on Quality and Safety in Health Care*; 8-11 April; Le Palais des Congrés, Paris, France. 2014.

CareTrack Kids

A $2.5 million research project investigating the quality and safety of children's healthcare

CareTrack Kids, will, for the first time, determine the percentage of healthcare encounters at which Australian children receive evidence- or consensus-based care for 16 paediatric conditions (for example, asthma, diabetes, upper respiratory tract infections, gastroenteritis, and attention deficit hyperactivity disorder) during 2012-2013 and examine the frequency and type of adverse events involving Australian children. In addition, we will run an intervention study to evaluate asthma control, using contemporary smartphone technology, and consumer engagement.

The Chief Investigators leading the research are Professor Jeffrey Braithwaite (AIHI), Professor Adam Jaffe (UNSW, Sydney Children's Hospitals Network [SCHN]), Professor Les White (NSW Kids and Families, SCHN, UNSW), Professor Christopher Cowell (SCHN), and Professor Mark Harris (Centre for Primary Health Care and Equity, UNSW). In addition, Associate Investigators and an International Advisory Group are contributing and creating a strong synergistic collaboration between researchers, policy makers, the Australian Government, the private health sector, safety and quality specialists, paediatricians and general practitioners.

We aim to deliver a range of important outcomes in this highly significant research, which is overdue, internationally-relevant, and supported by all relevant national and international communities. It will garner new knowledge about healthcare delivery systems and provide baseline data on appropriate care for common paediatric conditions. The rate and extent of adverse events in children will be identified. CareTrack kids will embrace methodological extension and innovations in research of this kind, including demonstrating the use of a wiki process for indicator assessment and a novel smartphone intervention. This work will create substantial information of value to national and international researchers, policy makers, patient groups and practitioners.

> **The appropriateness of healthcare delivered to Australian Children: CareTrack Kids**
>
> Funding Source: National Health and Medical Research Council Partnership Project
>
> Investigators: **Jeffrey Braithwaite**, Adam Jaffe, Les White, Christopher Cowell, Mark Harris
>
> Partner Organisations: Bupa Health Foundation, The Sydney Children's Hospitals Network, Chidren's Health Queensland, NSW Kids & Families, South Australia Health, The Clinical Excellence Commission
>
> Duration: July 2013 – June 2016

Patient Safety

Toward a safer health system

The Centre is contributing to four cross-linked programs of research into patient safety, across five years 2009-2013. Program 1 (CareTrack) was the most logistically challenging, determining that 57% of Australian healthcare encounters are appropriate for 22 common, high-burden-of-disease conditions. We published a companion paper to the CareTrack results (Runciman et al, *Medical Journal of Australia* 2012;197(2),78-81) which outlined the barriers to both appropriate care and its systematic ongoing measurement. We propose an innovative way forward involving collaborative development of wiki-based standards. Planning to test this method commenced in 2013 and will continue with our NHMRC Program Grant (no.1054146) in 2014.

Program 2 analyses medication management system problems that perpetuate flawed plans and failures of execution. Our landmark study, published in *PLoS*, showed that the introduction of electronic medication management systems (eMMS) in two Sydney hospitals reduced prescribing errors significantly at the two sites. Data from this study also allowed us to identify and classify a sample of new 'system-related' errors (errors associated with use of the eMMS), a novel and important discovery.

The goal of Program 3 is to develop a decision-support model for clinicians that detects when flawed plans are being executed. We have assembled global data of health IT incidents and are using these as the basis for ongoing monitoring and devising of corrective strategies. We also undertook a comparative review of national initiatives in six countries which found significant gaps in the safety governance of eHealth. Our goals are to guide the implementation of regulations and develop effective governance strategies for eHealth.

Program 4 is identifying the characteristics of organisations, clinicians, diseases and processes of care that predict levels of patient safety and quality of care, and the rate of dissemination of evidence into clinical practice. Analysing over 3 million emergency department records, we examined the causation of "the weekend effect", where being admitted to hospital on the weekend is associated with an increased chance of dying. We showed there was evidence both for lower quality of care as well as increased patient risk, varying between different patient's diagnoses. Recognising at-risk diagnoses where quality of care can be improved should minimise the weekend effect.

The Program Grant produced 94 peer-reviewed publications in 2013 and published a total of 368 papers in the five years of its life.

Selected Publications

Runciman WB, Coiera E, Day RO, Hannaford NA, Hibbert PD, Hunt TD, Westbrook JI, **Braithwaite J**. Towards the delivery of appropriate healthcare in Australia. *Medical Journal of Australia*. 2012; 197(2):78-81.

Wiley J, Westbrook M, Long J, Greenfield JR, Day RO, **Braithwaite J**. Multi-disciplinary diabetes team care: The experience of young adults with Type1 diabetes. *Health Expectations*. 2013; (Accepted 25 November).

Lipworth W, Taylor N, Braithwaite J. Can the theoretical domains framework account for the implementation of clinical quality interventions? A qualitative synthesis and mapping experiment. *BMC Health Services Research*. 2013; 13(1):530.

Westbrook JI, Reckmann M, Li L, Runciman W, Burke R, Lo C, **Baysari MT, Braithwaite J**, Day RO. Effects of two commercial electronic prescribing systems on prescribing error rates in hospital inpatients: A before and after study. *PLoS Medicine*. 2012; 9(1):e1001164.

Health Systems Networking

Social networks to encourage working together

Despite the investments and efforts expended in encouraging people to work effectively together in organisational communities and networks, there is no comprehensive, evidence-based, theoretically relevant framework, model or tool to evaluate communities of practice (CoPs) or social professional networks (SPNs) in the health sector. This project addresses this problem.

Literature reviews have confirmed the lack of empirical research directed at evaluating the impact of CoPs and SPNs in improving the quality and effectiveness of care provided by healthcare services. Literature reviews have also been directed at studying the gaps in social structures in non-health settings, as well as the brokers who fill those gaps.

Across the world, health systems are experimenting with different forms of clinical networks. This seems a particularly useful strategy if the goal is to bridge the naturally-occurring gaps between clinical processional groups, constituted in the traditional tribal arrangements.

Doctoral candidate Janet Long used social network analysis to show the weakening of tribal affiliation of clinicians and researchers after the introduction of a translational research network, suggesting the network structure facilitated bridging that gap. Secondly, she compared the members identified as key players using network analysis with those perceived as key players by the members. She found that central actors were easy to pick but brokers tended to be hidden and lower in profile. These valuable brokers could be targeted for supportive interventions but this is only possible if they are accurately identified. Interviews with the governing body members of the research network showed that their positions as central players in their respective places of work allowed distributed leadership. Participants also described a range of brokerage roles that they would use to facilitate the work of the network.

Selected Outputs

Cunningham FC, Morris AD, **Braithwaite J**. Experimenting with clinical networks: the Australasian experience. *Journal of Health Organization and Management.* 2012; 26 (6): 685-696.

Cunningham F, Ranmuthugala G, Plumb J, Westbrook J, **Braithwaite J**. Net benefits: assessing the effectiveness of clinical networks in Australia through qualitative methods. *Implementation Science.* 2012; 7:108.

Long J, Cunningham FC, Braithwaite J. Bridges, brokers and boundary spanners in collaborative networks: A systematic review. *BMC Health Services Research.* 2013; 13:158.

Cunningham F, Ranmuthugala G, Long J, Georgiou A, Westbrook J, **Braithwaite J**. Establishing and managing effective clinical and health networks: Evidence from two Australian states. In *Network to Network - The Inaugural Australasian Clinical Networks Conference*; 21-23 November; Sydney, Australia; 2012.

Cunningham F, Ranmuthugala G, Long J, Georgiou A, Westbrook J, **Braithwaite J**. Why leadership and management matter to clinical networks. In *Australasian College of Health Service Management: International Annual Congress: Inspiring Concepts in Health Management - Surfing the Crest of the Wave*; 15-17 August; Surfers Paradise, Gold Coast, Australia. 2012.

Long J, Cunningham F, Braithwaite J. A social network analysis of a new translational research network. In *Network to Network - The Inaugural Australasian Clinical Networks Conference*; 21-23 November; Sydney, Australia. 2012.

Long JC, Cunningham FC, Carswell P, Braithwaite J. Who are the key players in a new translational research network? *BMC Health Services Research.* 2013; 13:338.

Special Projects

National Health Performance Authority

The National Health Performance Authority commissioned Centre staff to examine the performance indicators used internationally to report publicly on healthcare organisations and local health systems. The project had two main aims:

- To identify international performance indicators that are used to report nationally consistent and locally-relevant information on healthcare organisations.

- To consult with international performance authorities to provide information on the sensitivity, specificity and utility of the indicators, indicators which have been discarded in other nations, and the learning experiences of other nations.

We identified 388 indicators that fulfil the 'nationally consistent and locally-relevant' criteria. Some 140 of the 388 international indicators (36%) have some alignment with the Australian Performance Accountability Framework indicators indicators.

Investigators: **Peter Hibbert**, Natalie Hannaford, **Janet Long, Jennifer Plumb, Jeffrey Braithwaite**

Hibbert P, Hannaford N, **Long J, Plumb J, Braithwaite J**. Final Report: Performance indicators used internationally to report publicly on healthcare organisations and local health systems. Australian Institute of Health Innovation, University of New South Wales. 2013.

Australian Department of Health and Ageing (DoHA)

The Centre conducted a review of 'Procedure 16 - General requirements for bodies operating assessment and accreditation of general practices for recognition under the Practice Incentives Program' for the Australian Department of Health and Ageing (DoHA) in mid-2013. The task was to document the limitations, advantages and workloads of the JAS-ANZ and ISQua accreditation frameworks, including investigating the qualitative variability in the two frameworks.

Three main recommendations were made:

- DoHA should create a regulatory role to oversee the ongoing development and implementation of accreditation in the general practice sector. There is an opportunity for DoHA to clarify governance arrangements, create needed leadership and provide accountability for the general practice accreditation scheme.

- DoHA needs to clarify or confirm the current policy arrangements for multiple accreditation bodies and agencies to operate in the sector.

- DOHA should consider developing a capacity to identify and draw on the existing evidence base for general practice accreditation and, where appropriate, arrange for research on general practice accreditation.

Investigators: **Jeffrey Braithwaite, David Greenfield and Peter Hibbert**

Greenfield D, Hibbert P, Christian-Hayes S, Braithwaite J. Final Report: UNSW Review of Procedure 16, General requirements for bodies operating assessment and accreditation of general practices for recognition under the Practice Incentives Program: Australian Institute of Health Innovation. 2013.

Our People

Professor Jeffrey Braithwaite

Ms Sue Christian-Hayes

Associate Professor Julie K. Johnson

Ms Margaret Jackson

Staff

Director

Professor Jeffrey Braithwaite BA *UNE*, DipLabRelsandtheLaw *Syd*, MIR *Syd*, MBA *Macq,* PhD *UNSW*, FAIM, FCHSM, FFPH RCP (UK)

Professor Braithwaite is Director of the Centre for Clinical Governance Research in Health and Foundation Director of the Australian Institute of Health Innovation. He has long been associated with UNSW Medicine. He joined the Centre as a Commonwealth Casemix Research Fellow in 1994, and was Head of the School of Health Services Management until it merged into the School of Public Health and Community Medicine in 2001.

Professor Braithwaite is internationally-recognised for his work in implementation science, quality and safety, health systems improvement and organisational behaviour in health settings.

His specific research interests include clinicians as managers, organisational theory, the future of the hospital, change management in healthcare, network theory, communities of practice, the evolutionary bases of human behaviour, quality and safety in healthcare, and international health policy development and implementation. Amongst other appointments he is Visiting Professor at the University of Birmingham, UK, and Senior International Research Fellow at the Canon Institute of Global Studies, Tokyo, Japan.

Deputy Director

Associate Professor Julie K. Johnson BA *UNC*, MSPH *UNC*, PhD *Dartmouth*

Julie K. Johnson is Associate Professor in UNSW Medicine and Deputy Director of the Centre for Clinical Governance Research. Her career interests involve building a series of collaborative relationships to improve the quality and safety of healthcare through teaching, research and clinical improvement. Her ultimate goal is to translate theory into practice while generating new knowledge about the best models for improving care. She served as Post Graduate Coordinator with a focus on building a supportive research community for our higher degree candidates.

Business Manager

Ms Sue Christian-Hayes

Ms Christian-Hayes' role is to provide financial and administrative support to the Management Board and the Director of the Centre, as well as financial management for all Centre projects. She is also the Administrative Manager for the Australian Institute of Health Innovation, a research capability within UNSW Medicine which brings together the Centre for Clinical Governance Research in Health, Centre for Health Informatics, the Simpson Centre for Health Services Research and the Centre for Health Systems and Safety Research.

Mrs Margaret Jackson

Mrs Jackson joined the Centre in July 2008 as a part-time research and administrative assistant. Her primary role at the Centre is to undertake literature searches,

Ms Jackie Mullins

Dr Robyn Clay-Williams

Dr Brette Blakely

Ms Deborah Debono

Staff (cont'd)

collect research outputs and maintain the Centre's endnote library. For more than 20 years, Mrs Jackson worked on standards development for a healthcare accreditation agency, commencing in an administrative assistant's role and progressing to be a project officer. During that time her duties also involved maintaining the reference and historical collection of the organisation, supporting the research unit, and assisting with special projects and the production of publications. She uses these skills to support the Centre's activities.

Ms Jackie Mullins

Ms Mullins joined the Australian Institute of Health Innovation in June 2011 as an Administrative Assistant, providing administrative support and reception duties for the Centre for Clinical Governance Research in Health as well as the other Centres within the Institute. Her role also involves the organisation of diary appointments, conference engagements, events management and travel itineraries for Professor Jeffrey Braithwaite.

Researchers/Personnel

Dr Brette Blakely
BA (summa cum laude) *Wellesley College*, **MA Bioethics** *Monash Uni*, **PhD Neuroscience** *Melb Uni*

Dr Blakely completed her undergraduate degree at Wellesley College in the US before migrating to Australia where she worked as a Forensic Officer while undertaking her Master in Bioethics. Subsequently she completed her PhD in Neuroscience at the Florey Institute for Neuroscience and Mental Health. She has university teaching and research experience in a variety of disciplines, including professional ethics, business and organisational communication. Currently she is a Research Assistant at the Centre working on projects related to patient safety and health reform.

Dr Robyn Clay-Williams, PhD *UNSW*, BEng *RMIT*

Dr Clay-Williams is a former military test pilot, and an electronics engineer and flight instructor. As a postdoctoral fellow, she conducts health services research in the field of human factors in healthcare. Current projects include applying engineering resilience to healthcare to improve patient safety, system dynamics, modelling of healthcare systems and processes, usability of medical devices and IT systems, and analysis of behaviours of healthcare professionals.

Ms Deborah Debono RN, RM, BA Psych (Hons) *UNSW*

Ms Debono has clinical, research and administrative experience in nursing, psychology and the university. Ms Debono's academic qualifications, coupled with nursing experience in metropolitan, rural and remote acute healthcare settings, provide her with research expertise as well as a first-hand understanding of clinical settings. As a researcher, Ms Debono

Ms Stephanie Dick

Dr Reece Hinchcliff

Dr David Greenfield

Dr Gina Lamprell

Ms Klay Lamprell

investigates the influence of context, culture, technology, and social relationships on clinicians' practice. Ms Debono's doctoral research focuses specifically on the role of workarounds in the delivery of healthcare.

Ms Stephanie Dick, BA Criminology and Psychology MSC Psychology, *Sheffield Hallam*

Ms Dick completed her undergraduate degree in Criminology and Psychology in 2008 and then completed a Masters degree in Psychology. She worked for the NHS as an ADHD project worker, which involved providing support for parents with children with ADHD, through home visits and a 10 week management course. As a Research Assistant at the Centre, she is involved in a number of projects, including quality and safety, intra- and inter-relationships between medical professionals, and social structures within healthcare. Ms Dick completed her work with the Centre in May 2013.

Dr David Greenfield BSc, BA, BSocWk *UQ***, Grad Cert IT** *UTS***, PhD** *UNSW*

Dr Greenfield is a Senior Research Fellow in the Centre and adjunct lecturer in the School of Public Health and Community Medicine. His expertise and knowledge are in the areas of accreditation and surveying processes, organisational culture, community of practice theory, interprofessional collaboration, and qualitative research methods. Dr Greenfield's work is progressing understanding of how, individually and collectively, professional conduct, quality and safety are shaped and regulated to mediate organisational, professional and care outcomes.

Dr Reece Hinchcliff BA (Hons) *Syd***, PhD** *Syd*

Dr Hinchcliff is a qualitative researcher whose work focuses on several content areas, including policy development and implementation, knowledge translation and healthcare accreditation. The common theme is the use of innovative mixed-

method research to promote the uptake of evidence-informed public health policies and practices. He is currently working on an Australian Research Council Linkage Project concerning the evaluation and improvement of Australian health service accreditation programs.

Ms Gina Lamprell BA Hons *Syd*

Ms Lamprell is a Research Assistant who joined the Centre in May 2013. She majored in Sociology and Art History and later completed her Honours thesis in Sociology, which focused on women's education and gender policy in Papua New Guinea. Her interests are in health services, policy and gender in relation to the development context.

Ms Klay Lamprell BA (Comm & Lit) *Macq***, Grad Dip Conflict Resolution** *Macq***, Cert Languages** *Macq*

Ms Lamprell is an award-winning journalist with experience in researching, writing and editing for a wide range of publications.

Dr Wendy Lipworth

Ms Danielle Marks

Dr Ben Manning

Dr Jacqueline Milne

Staff (cont'd)

Through 2013 she worked with Professor Braithwaite to develop books based on the Centre's interdisciplinary research into social structures, organisational behaviour, human evolution and systemic paradigm shifts. Ms Lamprell is currently undertaking her PhD on the use of narrative in patient- centred healthcare.

Dr Wendy Lipworth
BSc (med) Hons *UNSW*, **MBBS** *UNSW*, **MSc** *Syd*, **PhD** *Syd*

Dr Lipworth is an empirical bioethicist with an interest in the ethics of biomedical innovation. Her specific topics of interest include the ethics of drug development, evidence-based medicine, biomedical publishing and biobanking (tissue banking). She uses mainly qualitative research methods to elicit the values underpinning these processes, and uses this to inform policy and practice. Dr Lipworth is a medical graduate (UNSW 1999) and was awarded her PhD in 2009 (University of Sydney). She

has recently completed a NHMRC Postdoctoral Research Fellowship at the Australian Institute of Health Innovation (2010-2013) and is now a NHMRC Career Development Fellow at the Centre for Values, Ethics and the Law in Medicine, University of Sydney.

Dr Ben Manning
BA (Hons) *UNSW*, **PhD** *UNSW*

Dr Manning is a sociologist, specialising in economic, cultural, and organisational sociology. His background includes research in medical education, organisational leadership and culture, gender in organisations, and the cultural causes and consequences of economic behaviour. As a research fellow with the Centre, he applies these skills to research health networks and communities of practice.

Ms Danielle Marks
BA Comm (Journ) *UTS*, **Grad Dip Speech Comm** *Macq*

Ms Marks works as a part time Research Assistant at the Centre, while completing a Master of Speech and Language Pathology at Macquarie University. She has a background in journalism and applies this expertise to communication in health systems. She has experience in a range of projects in research and evaluation, including implementation science, behavioural characteristics of doctors, nurses and allied health professionals, and an evaluation of social and structural holes, boundaries and weak ties in organisations and communities.

Dr Jacqueline Milne
BHA *UNSW*, **MCom** *UNSW*, **GradCertHEd** *UNSW*, **GradDipLangTeach** *UTS*, **PhD** *UNSW,* **AFCHSM**

Dr Milne is a Postdoctoral Research Fellow at the Centre. She has a clinical background in nursing and was an Associate Lecturer and

Dr Max Moldovan

Dr Pooria Sarrami-Foroushani

Dr Natalie Taylor

Researcher in the School of Health Administration (UNSW) before working as Clinical Superintendent of St Vincent's Hospital Sydney for seven years. Her PhD investigated junior doctors' interprofessional practice and learning in Australian teaching hospitals. She is a qualitative researcher with interests in organisational culture and organisational behaviour, the postgraduate training of junior doctors, safety, professionalism and ethics in healthcare, and simulated health education and training.

She is an Associate Fellow of the Australasian College of Health Service Management and holds an appointment with the Health Professional Councils Authority in NSW as a member of Tribunal Panels and Professional Standards Committees. Her postdoctoral fellowship is in the field of specialist health service delivery evaluation.

Dr Max Moldovan
BSc MESI, MBus *QUT*, PhD *Melb*

Dr Moldovan is a Research Fellow working on an ARC project devoted to accreditation of healthcare organisations and development of the related evidence-informed health policies. His expertise is in quantitative analysis and statistical learning. Before joining the Centre, he was involved in several successfully completed ARC projects. Dr Moldovan was a leading research analyst in the international team that pioneered the area of clinically-functional pharmacogenomic discoveries. He co-authored several exact and efficient analytical methods widely accepted in medical research and clinical practice. He is the author of a book describing and formalising the related inferential procedures.

Dr Pooria Sarrami-Foroushani
MD *IUMS*, PhD *Notts*

Dr Sarrami-Foroushani is a medical sociologist with a doctoral degree in medicine and a PhD in sociology.

His broad expertise includes the study of social aspects of health and medicine for more than a decade. He has extensive international research expertise and has worked in Iran, the United Kingdom and Australia, focusing on consumer and community engagement, clinical variation, and mental health. He is active in supervising postgraduate students undertaking research on consumer and community engagement in healthcare.

Dr Natalie Taylor
PhD *UoL*, MSc, BScHons

Dr Taylor is building an international reputation through her work in health systems research, studying ways of improving healthcare.

A psychologist with a PhD from the University of Leeds, she has particular expertise in health and organisational behaviour change, human factors, patient safety, and measurement. Dr Taylor is becoming increasingly recognised for bringing behaviour change and implementation science concepts together to achieve improvements

Dr Joanne Travaglia

Staff (cont'd)

in clinical contexts. Her current role is to contribute to a program of research in implementation science, particularly focused on the AIHI's five year NHMRC program grant: *Creating safe, effective systems of care: the translational challenge*, conducting research into health systems improvement.

Dr Joanne Travaglia
BSocStuds (Hons) *Syd*,
Grad Dip Adult Ed *UTS*,
MEd ACU, PhD *UNSW*

Dr Joanne Travaglia is a medical sociologist with experience in the health field as a practitioner, manager, researcher and educator. She is Director of the Health Management and Summer and Assistant Director of the Future Health Leaders Programs in the School of Public Health and Community Medicine, Faculty of Medicine, University of New South Wales. Her research addresses various aspects of health services management and leadership, with a particular focus on the impact of patient and clinician vulnerability and diversity on the safety and quality of care. While she is primarily a qualitative researcher, she has extensive experience in conducting mixed methods research, including the use of data mining.

Visiting Professors, Conjoint Professors and Visiting Fellows

Dr Jen Bichel-Findlay
DipAppSc *QIT*, BAppSc *QUT*, MPH QUT, DipAppSc (Ned) *QUT*, MN *UTS,* HScD *Syd*, FACHI, FACN, FRCNA, AFCHSM

Dr Andrew Carson-Stevens
BSc (Hons) *Cardiff,* MB *Cardiff,* BCh *Cardiff,* MPhil *Cardiff* (from September 2013)

Dr Peter Carswell
PGDipAppPsy *MassU,* PhD *UAuck,* MCom(Hons) *UAuck*, BSc (Psy) *UAuck*

Associate Professor Angus Corbett
BA LLB *Macq*, LLM *UW-Madison*

Dr Frances Cunningham
BA *UQld*, ScD *JHU*, DipEd *QUT*, AFACHSM, FAICD

Professor Timothy Devinney
BSc *Carnegie-Mellon Uni,* MA *UniChicago*, MBA *UniChicago*, PhD *UniChicago*

Ms Lisa Forbes
MNursMgmt *UTS*, DipMedSurgNsg *UTS*, RN

Associate Professor David Henderson
MB, BS *Syd,* FRACP, MBA *Qld*

Dr Paula Hyde
PhD *Man*, MBA *Man*, BSc (Hons) *Salford*

Hono rary Associate Professor Brian Johnston
BHA *UNSW*, Dip Pub Admin *NSW Inst of Tech*

Associate Professor Ross Kerridge
MB BS *Syd*, FRCA, FANZCA

Ms Marie Kristensen
MHSC *AarhusU*

Adjunct Senior Lecturer Paul Long
MA *Syd*

Dr Lena Low
Acctg Cert *USP*, Grad Dip Mgmt *SCU*, MBA *SCU,* Diploma AICD, FAICD, PhD *UNSW*

Professor Russell Mannion
BA (Hons) *Stirling,* PgDip Hlth Econ *Tromso*, PhD *Manchester,* FRSA

Professor Yukihiro Matsuyama
PhD *Kyushu Uni*, BA *Tokyo Uni*

Dr Virginia Mumford
MBBS *Lond*, MBA *CUBS*, MHA *UNSW*

Dr Peter Nugus
MAHons *UNE*, MEd *UTS*, PhD *UNSW*

Professor John Øvretvelt
BSc (Hons), MPhil, PhD, C. Psychol, MIHM

Dr Marjorie Pawsey
AM, MBBS *UQ*, DPH *Syd*, FAAQHC

Dr Charles Pain
MRCS *Eng*, LRCP *London*, MSc *Manchester,* MFPHM *UK*, FFPH, FAFPHM, AFCHSE

Dr Jennifer Plumb
BA (Hons) *UniOxford*, MSc UniCollege *London*, PhD *UNSW*

Dr Geetha Ranmuthugala
MBBS *UPNG*, MApplEpi, PhD *ANU*, FRSPH *UK*, AFACHSM

Ms Maureen Robinson
Dip Phty, MHA *UNSW,* FAAQHC

Professor William (Bill) Runciman
BSc (Med) *Wits*, MBBCh *Wits*, FANZCA, FJFICM, FHKCA, FRCA, PhD *Flinders*

Professor Charles Shaw
MBBS *ULondon*, PhD *UWales*, FFPH, FHSM, Dip HCOM

Dr Alison Short
BMus (MusTh) *UofM*, AMusA AMEB, MA(MusTh) *NYU*, CertIV(A&WT), PhD *UTS*

Conjoint Associate Professor Mary Westbrook
AM, BA (Hons) *Syd*, MA (Hons) *Macq*, PhD *Macq*, FAPS

Professor Les White
AM DSc *UNSW*, MBBS *Syd*, FRACP, MHA *UNSW*, AFACHSM

Full Time Research Candidates

Ms Anne Hogden
BA (Hons) *UNewc*, BSpeech Pathology *UNewc*

Supervisor: Dr David Greenfield

Co-supervisors: Dr Peter Nugus, Professor Matthew Kiernan

PhD: *What influences patient-centred decision-making in motor neurone disease care? A study of stakeholder perspectives*

Ms Ru Karen Kwedza
MHServ Mgt *Griffith*, MNutDiet Griffith, BBiomedSc *Griffith*

Supervisor: Associate Professor Julie Johnson

Co-supervisors: Professor Nick Zwar, Associate Professor Sarah Larkins

PhD: *Clinical governance in rural, regional and remote primary healthcare*

Ms Judith Lancaster
BA.LLB (Hons I) *Macq*, M.Bioeth *UTS*, Diploma of Nursing, Grad Cert H.ed *UTS,* Grad Dip Legal Practice *UTS*

Supervisor: Professor Jeffrey Braithwaite

Co-supervisor: Dr Wendy Lipworth

PhD: *Beyond accreditation: the benefits of surveying*

Ms Janet Long
RN, BSc (Hons1) *Macq*, CertOphthNurs *Sydney Eye*, MN *UTS*, MRCNA

Supervisor: Professor Jeffrey Braithwaite

Co-supervisors: Dr Frances Cunningham, Dr Peter Carswell

PhD: *Network structure and the role of key players in a translational cancer research network*

Ms Jacqueline Milne
BHA UNSW, MCom *UNSW*, GradCertHEd *UNSW* GradDipLangTeach *UTS*, PhD *UNSW*, AFCHSM

Supervisor: Professor Jeffery Braithwaite

Co-supervisor: Dr David Greenfield

PhD: *Enhancing quality and safety: a comparative study exploring interprofessional learning and interprofessional practice in international medical graduates and Australian medical graduates*

Dr Virginia Mumford
MBBS *Lond*, MBA *CUBS*, MHA *UNSW*

Supervisor: Professor Jeffrey Braithwaite

Co-supervisor: Kevin Forde

PhD: *Economic appraisal of health services accreditation in Australia*

Mr David Pereira
BSc (Hons) *UPM*, MBA *MMU Malaysia*

Supervisor: Dr David Greenfield

Co-supervisors: Professor Jeffrey Braithwaite, Dr Geetha Ranmuthugala

PhD: *The association between team characteristics, performance and Human Resource Management (HRM) in rehabilitation services*

Ms Jennifer Plumb
BA (Hons) *Oxon*, MSc *Lond*

Supervisor: Professor Jeffrey Braithwaite

Co-supervisor: Dr Joanne Travaglia

PhD: *Professional conceptualisation and accomplishment of patient safety in mental healthcare*

Ms Anne Sinclair
RN, Med

Supervisor: A/Professor Julie Johnson

Co-supervisors: Dr Jo Travaglia, Professor Jeff Fuller

PhD: *General practice from the perspective of a learning organisation*

Dr Janice Wiley
MBBS *UNSW*, MPH *UNSW*, MHM *UNSW*

Supervisor: Dr Jerry Greenfield

Co-supervisors: Professor Jeffrey Braithwaite, Professor Ric Day

PhD: *A mixed method analysis of the models of self-management in young adults with type 1 diabetes*

Part Time Research Candidates

Ms Deborah Debono
RN, RM, BA Psych (Hons) *UNSW*

Supervisor: Professor Jeffrey Braithwaite

Co-supervisors: Professor Deborah Black, Dr David Greenfield

PhD: *Engaging with electronic medication systems in everyday practice: how is it done?*

Dr Frank Formby
MBBS *UNSW* FAChPM

Supervisor: Professor Jeffrey Braithwaite

Co-supervisor: Professor Kenneth Hillman

PhD: *A novel method of evaluating palliative care services*

Ms Evelyn Harrison-Varga

Supervisor: Professor Jeffrey Braithwaite

Co-supervisor: Professor Deborah Black

PhD: *The Long-Term Interaction of Private Health Insurance Predictors with Commonwealth Private Health Sector Policy*

Ms Sally Nathan
BSc, MPH *UNSW*

Supervisor: Professor Jeffrey Braithwaite

Co-supervisor: Niamh Stephenson

PhD: *Consumer participation in health services*

Ms Mary Potter Forbes
RN, BHA *UNSW*, MCom *UNSW*, JD *UTS*, AFCHSM

Supervisor: Associate Professor Julie Johnson

Co-supervisor: Dr Joanne Travaglia

PhD: *Constructing trust in the mental health built environment*

Ms Bella St Clair
BSc *Macq*, MAppMgt (Hth) *UON*, MBA *UON*, GAICD

Supervisor: Dr David Greenfield

Co-supervisor: Dr Andrew Georgiou

PhD: *Financial incentives and healthcare accreditation*

Ms Victoria Walton
BN RN *MPH*

Supervisor: Dr David Greenfield

Co-supervisor: A/Professor Julie Johnson

PhD: *How clinicians and patients in a multidisciplinary ward round define roles and interact with each other*

Ms Eilean Watson
BSc (Hons I) *UNSW*, MHPEd *UNSW*

Supervisor: Professor Jeffrey Braithwaite

Co-supervisors: Professor Patrick McNeil, Dr Lesley Land

PhD: *Curriculum mapping in medicine: How is it used?*

Dr Su-Jen Yap
MBBS *Syd*, MMED *Syd*, FANZCA

Supervisor: Professor Ken Hillman

Co-supervisors: Professor Jeffrey Braithwaite, Dr David Greenfield

PhD: *Developing perioperative capacity by a systems and sociocultural learning approach*

Publications 2013

Publications

Books and Book Chapters

Barach P, **Johnson J**. Assessing risk and harm in the clinical microsystem: A systematic approach to patient safety. In: Sollecito W, **Johnson J**, editors. *Continuous quality improvement in health care: Theory, implementations, and applications, 4th edition.* Jones and Bartlett; 2013; p. 249-274.

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Robertson H, Nicholas N, Georgiou A, **Johnson J, Travaglia J**. A spatial informatics for aged care. In: Grain H, Schaper LK, editors. *Studies in Health Technology and Informatics*. IOS Press. 2013; (188) p. 102-7.

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Lipworth W, Montgomery K, Little M. How pharmaceutical industry employees manage competing moral commitments. *Journal of Bioethical Inquiry*. 2013; (DOI: 10.1007/s11673-013-9449-4).

Lipworth W, Taylor N, Braithwaite J. Can the theoretical domains framework account for the implementation of clinical quality interventions? A qualitative synthesis and mapping experiment. *BMC Health Services Research*. 2013; 13(1):530.

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Mahurkar S, **Moldovan M**, Suppiah V, O'Doherty C. Identification of shared genes and pathways: a comparative study of multiple sclerosis susceptibility, severity and response to interferon beta treatment. *PLoS ONE*. 2013; 8(2):e57655.

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Moldovan M, Enikeev R, Syed-Abdul S, Nguyen PA, Chang YC, Li YC. Disease universe: Visualisation of population-wide disease-wide associations. *Advances in Systems Science and Application*. 2013; (Accepted 22 December).

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Nathan SA, Braithwaite J, Stephenson N. Facilitating the action of community representatives in a health service: The role of a community participation coordinator. *BMC Health Services Research*. 2013; 13(1):154.

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Journal Articles – Refereed

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Phillips RL, **Short A**, Dugdale P, **Nugus P, Greenfield D**. Supporting patients to self-manage chronic disease: Clinicians' perspectives and current practices. *Australian Journal of Primary Health*. 2013; (Published online: May 23).

Shaw CD, **Braithwaite J, Moldovan M,** Nicklin W, Grgic I, Fortune T, et al. Profiling healthcare accreditation organisations: An international survey. *International Journal for Quality in Health Care*. 2013; 25(3):222-31.

Short A, Gibb H, Fildes J, Holmes C. Exploring the role of music therapy in cardiac rehabilitation post cardiothoracic surgery: A qualitative study utilizing the Bonny Method of Guided Imagery and Music. *Journal of Cardiovascular Nursing*. 2013; 28(6):E74-E81.

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Tolley J, **Sarrami-Foroushani P**. What do we know about one to one peer support for adults with a burn injury? A scoping review. *Journal of Burn Care & Research*. 2013.

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Wiley J, Westbrook M, Long J, Greenfield JR, Day RO, **Braithwaite J**. Multi-disciplinary diabetes team care: The experience of young adults with Type1 diabetes. *Health Expectations*. 2013; (Accepted 25 November).

Reports and Monographs

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MacLennan M, **Johnson J, Lipworth W, Greenfield D, Dunn A, Hibbert P**, et al. Preliminary Review of the Sydney Alliance for Health Research and Teaching (SAHRT): Australian Institute of Health Innovation (AIHI); 2013.

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Peer Reviewed & Published Conference Abstracts

Banks M, **Greenfield D**, Picone D, Braithwaite J. The ripple effect: Diffusing health policy through the use of icons. ISQua's *30th International Conference: Quality and Safety in Population Health and Healthcare*. 13-16October; Edinburgh, Scotland. 2013.

Braithwaite J. Innovations in health systems and accreditation [Abstract & Keynote Address]. National Surveyor Conference 2013: *Ambassadors of Quality*; 22-25 August; Ottawa, Canada. 2013.

Braithwaite J, Marks D, Taylor N. Harnessing implementation science to improve care quality and patient safety in complex adaptive systems: A systematic review of targeted literature. *ISQua's 30th International Conference: Quality and Safety in Population Health and Healthcare*; 13-16 October; Edinburgh, Scotland. 2013.

Braithwaite J, Plumb J. Three attributes of everyday functioning: Social organization, cultural features and network characteristics [Abstract & Presentation]. *Resilient Health Care Net Summer Meeting;* 26-28 August; Middlefart, Denmark. 2013.

Clay-Williams R. The clinical Usability Rating of Equipment (URE) scale: A simplified assessment tool for the clinician [Abstract]. *HFES 2013 Symposium on Human Factors and Ergonomics in Health Care: Advancing the Cause*; 11-13 March; Baltimore, USA. Human Factors and Ergonomics Society; 2013.

Clay-Williams R, Braithwaite J. Resilience or Swiss cheese: Trade- offs and techniques for managing medical error in lean times (Abstract & Presentation). 2013 Royal Australian *College of Medical Administrators (RACMA) Conference*; 4-6 September; Gold Coast, Australia. 2013.

Debono D, Braithwaite J. How everyday functioning in acute care really works: The case of nurses' workarounds [Abstract &

Presentation]. *Resilient Health Care Net Summer Meeting*; 26-28 August; Middlefart, Denmark. 2013.

Elnour AA, Ford D, Clark S, Morgan M, **Johnson J**, Dunbar J. Improving patient safety in Australian primary care. [Abstract & Poster]. *10th Annual International Clinical Microsystem Festival - Scientific Day*; 1 March; Jonkoping, Sweden. 2013.

Gobel B, **Johnson J**, Kalkman C, Zwart D. Stakeholder perspectives on handovers between hospital and community: An evaluation through a microsystems lens [Abstract & Poster]. *International Forum on Quality and Safety in Health Care*; 16-19 April; London, UK. Institute for Healthcare Improvement (IHI); 2013.

Greenfield D, Donninson A, Pike S, Bolger-Harris H, **Hinchcliff R, Pawsey M**, Westbrook J, **Braithwaite J**. Revising accreditation standards for general practice: an analysis of the resources consumed, expertise required and outcomes produced [Abstract & Poster]. *ISQua's 30th International Conference: Quality and Safety in Population Health and Healthcare*; 13-16 October; Edinburgh, Scotland. 2013.

Greenfield D, Hinchcliff R, Braithwaite J. Is accreditation an effective strategy to improve health care systems, outcomes and partnerships in General Practice? [Abstract & Poster]. *2013 Primary Health Care Research Conference*; 10-12 July; Sydney, Australia. 2013.

Heiderscheit A, **Short A**, Chlan L. International perspectives on collaborative music therapy research [Abstract]. Cultural Diversity in Music Therapy Practice, Research and Education, *14th WFMT World Congress of Music Therapy*; 7-12 July; Vienna& Krems, Austria. W*orld Federation of Music Therapy* (WFMT); 2014.

Hinchcliff R, Carswell P, Greenfield D, Braithwaite J. Involving consumers in healthcare through accreditation programs

[Abstract & Oral Presentation]. *ISQua's 30th International Conference: Quality and Safety in Population Health and Healthcare;* 13-16 October; Edinburgh, Scotland. International Society for Quality in Health Care; 2013.

Hinchcliff R, Greenfield D, Banks M, Braithwaite J. Implementing nation-wide mandatory accreditation standards: Lessons from the Australian experience [Abstract & Oral Presentation]. *ISQua's 30th International Conference: Quality and Safety in Population Health and Healthcare*; 13-16 October; Edinburgh, Scotland. International Society for Quality in Health Care; 2013.

Hinchcliff R, Greenfield D, Carswell P, Mumford V, Braithwaite J. How can accreditation promote partnerships among healthcare providers and consumers? [Abstract & Oral Presentation]. *2013 Primary Health Care Research Conference*; 10-12 July; Sydney, Australia. 2013.

Hogden A, Greenfield D, Nugus P, Kiernan M. Comparing stakeholder perspectives: A model of decision- making for amyotrophic lateral sclerosis multidisciplinary care [Abstract & Poster]. *ISQua's 30th International Conference: Quality and Safety in Population Health and Healthcare*; 13-16 October; Edinburgh, Scotland. International Society for Quality in Health Care (ISQua); 2013.

Hogden A, Greenfield D, Nugus P, Kiernan MC. Developing a model of patient-centred decision-making for amyotrophic lateral sclerosis multidisciplinary care [Abstract & Presentation]. *24th International Symposium on ALS/MND*; 6-8 December; Milan, Italy. 2013.

Johnson J, Bailey J, Barach P. Learning from patient stories to improve care [Abstract & Panel Presentation]. *International Forum on Quality and Safety in Health Care*; 16-19 April; London, UK. Institute for Healthcare Improvement (IHI); 2013.

Johnson J, Debono D, Kim J, Leitner R, Florio T, **Milne J**. Asking stakeholders what they need: Shaping service delivery for people with intellectual disability and mental health problems. *2013 Primary Health Care Research Conference*; 10-12 July; Sydney, Australia. 2013.

Johnson J, Knight A, Ford D, Frick C. A national quality improvement collaborative to increase capacity for primary care improvement in Australia [Abstract & Poster]. *International Forum on Quality and Safety in Health Care*; 16-19 April; London, UK. Institute for Healthcare Improvement (IHI); 2013.

Kellner A, **Greenfield D**, Lawrence S, Townsend K. Does hospital accreditation promote high performance in human resource management practice? [Abstract]. *ISQua's 30th International Conference: Quality and Safety in Population Health and Healthcare*; 13-16 October; Edinburgh, Scotland. 2013.

Kwedza R, Johnson J, Zwar N, Larkins S. Developing clinical governance systems in rural and remote primary healthcare – a multiple case study approach [Abstract & Presentation]. *8th Health Services Policy and Research Conference: Doing better with less: Enhancing health system performance in difficult times*; 2-4 December; Wellington, New Zealand. 2013.

Kwedza R, Larkins S, Zwar N, **Johnson J**. Primary health care clinical governance – "who are the leaders?" [Abstract]. *2nd International Primary Health Care Reform Conference: Rocking The Boat*; 17-19 March; Brisbane, Australia. 2014.

Lawlis T, **Greenfield D**, Anson J. Are the barriers to and enablers of IPE static or dynamic? A multi-method interprofessional investigation [Abstract]. *Professional Development of Health Professional Educators, Australian and New Zealand Association of Health Professional Educators*; 24-27 June; Melbourne, Australia. 2013.

Lawlis T, **Greenfield D**, Anson J. A model for capturing stakeholder interactions in interprofessional education [Abstract]. *Professional Development of Health Professional Educators, Australian and New Zealand Association of Health Professional Educators*; 24-27 June; Melbourne, Australia. 2013.

Low L, Braithwaite J, Greenfield D. Accreditation survey reliability: Techniques to achieving a credible survey outcome [Abstract]. *ISQua's 30th International Conference: Quality and Safety in Population Health and Healthcare*; 13-16 October; Edinburgh, Scotland. 2013.

Milne J, Greenfield D, Braithwaite J. Infusing the practice of working collaboratively in teaching hospitals: Easier said than done [Abstract & Poster]. *ISQua's 30th International Conference: Quality and Safety in Population Health and Healthcare*; 13-16 October; Edinburgh, Scotland. 2013.

Milne J, Greenfield D, Braithwaite J. Tribes or teams: Testing times for junior doctors in teaching hospitals [Abstract & Presentation]. *18th National Prevocational Medical Education Forum;* 3-6 November; Adelaide, Australia. 2013.

Moldovan M, Greenfield D, Clark S, **Braithwaite J**. A new approach to analysing accreditation data to stimulate organisational performance improvement [Abstract & Poster]. *30th International Conference: Quality and Safety in Population Health and Healthcare*; 13-16 October; Edinburgh, Scotland. 2013.

Mumford V, Greenfield D, Forde K, **Braithwaite J**. An economic framework to evaluate health services accreditation [Abstract & Poster]. *ISQua's 30th International Conference:Quality and Safety in Population Health and Healthcare*; 13-16 October; Edinburgh, Scotland. 2013.

Peer Reviewed & Published Conference Abstracts

Mumford V, Greenfield D, Forde K, **Hinchcliff R, Braithwaite J**. Evaluating primary care accreditation: Developing the SIQNS framework [Abstract & Poster]. *2013 Primary Health Care Research Conference*; 10-12 July; Sydney, Australia. 2013.

Mumford V, Greenfield D, Gospodarevskaya E, Braithwaite J. Does accreditation make Australian hospitals cleaner and safer? [Abstract]. *The 35th Australian Conference of Health Economists*; 26-27 September; Canberra, Australia. 2013.

Pereira D, Greenfield D, Ranmuthugala G, **Braithwaite J**. Enhancing healthcare quality through the role and potential of human resources departments [Abstract & Presentation]. *ISQua's 30th International Conference: Quality and Safety in Population Health and Healthcare*; 13-16 October; Edinburgh, Scotland. 2013.

Potter Forbes M, Barach P. Controlling latent risks – a quality improvement project in planning and procurement [Abstract]. *2013 Healthcare Design Conference*; 16-19 November; Orlando, Florida. 2013.

Robertson H. Dementia in Africa: A spatial approach to chronic disease modelling [Abstract & Presentation]. *International Istanbul Initiative on Ageing, International Federation on Ageing (IFA)*; 4-6 October; Istanbul, Turkey. 2013.

Robertson H, Nicholas N, Rosenfeld T, Georgiou A, **Johnson J**, Travaglia J. The virtual aged care system: System integration in an age of big data [Abstract & Poster]. *8th Health Servicesand Policy Research Conferenc*e (HSRAANZ); 2-4 December; Wellington, New Zealand. 2013.

Robertson H, Nicholas N, Rosenfeld T, Georgiou A, **Johnson J, Travaglia J**. Spatial literacy for the health sciences: Capacity building for the 21st Century [Abstract & Presentation]. *8th Health Services and Policy Research Conference*, (HSRAANZ); 2-4 December; Wellington, New Zealand. 2013.

Robertson H, Nicholas N, Travaglia J, Georgiou A, **Johnson J**. Vulnerability and change in the global south: A spatially informed approach [Abstract & Presentation]. *People and the Planet 2013: Transforming the Future*; 6 September; Melbourne, Australia. 2013.

Robertson H, Nicholas N, Travaglia J, Georgiou A, **Johnson J**. A global model of dementia prevalence: A virtual earth approach [Abstract & Presentation]. *International Istanbul Initiative on Ageing, International Federation on Ageing (IFA)*; 4-6 October; Istanbul, Turkey. 2013.

Robertson H, Nicholas N, **Travaglia J**, Georgiou A, Johnson J, Rosenfeld T. Zones of Vulnerability II: A virtual spatial model for ageing policy analysis [Abstract & Presentation]. *Australian Social Policy Conference*; 16-18 September; University of New South Wales. 2013.

Sarrami Foroushani P, Travaglia J, Debono D, Braithwaite J. A new framework for evaluating consumer and community engagement in health care systems: results of a meta- review [Abstract & Poster]. *ISQua's 30th International Conference: Quality and Safety in Population Health and Healthcare*; 13-16 October; Edinburgh, Scotland. 2013.

Schneider J, **Sarrami Foroushani P**, Grime P, Thornicroft G. Acceptability to users of MoodGYM versus informational websites in dealing with depression [Abstract & Oral Presentation]. *The XXI World Congress of Social Psychiatry*; 29 June-2 July; Lisbon, Portugal. 2013.

Short A. Making a difference in emergency care: The auditory environment as a public health issue [Abstract & Presentation]. *Music and Health: Evidence and Evolution 39th National Australian Music Therapy Association Conference*; 14-15 September; Melbourne, Australia. Australian Music Therapy Association; 2013.

Short A. Extending the impact of BMGIM: A role in health promotion and public health initiatives [Abstract]. *Music and Imagery: Embracing the Imagination for Health and Wellbeing, 5th Music and Imagery Association of Australian (MIAA) Conference*; 26-27 April; Melbourne, Australia. Music and Imagery Association of Australia; 2014.

Short A, Heiderscheit A. Music therapy in the context of interprofessional care: Connections and conversation [Abstract]. *Cultural Diversity in Music Therapy Practice, Research and Education, 14th WFMT World Congress of Music Therapy*; 7-12 July; Vienna & Krems, Austria. World Federation of Music Therapy (WFMT); 2014.

Sinclair A, Johnson J, Travaglia J, Fuller J. General practice from a learning organisation perspective [Abstract & Poster]. *10th Annual International Clinical Microsystem Festival*; 27 February-1 March; Jonkoping, Sweden. 2013.

Sinclair A, Johnson J, Travaglia J, Fuller J. Action imperatives for a learning organisation approach in General Practices [Abstract & Poster]. *2nd International Primary Health Care Reform Conference*; 17-19 March; Brisbane, Australia. 2013.

Varndell W, Ortiga JS, Kanapathipillai S, Hilbers J, **Short A**. Communicating in the ED: Understanding the nature and effects of noise [Abstract & Presentation]. *11th International Conference for Emergency Nurses (ICEN)*; 9-12 October; Melbourne, Australia. College of Emergency Nursing Australasia (CENA); 2013.

Conference Papers - Published

Kellner A, Townsend K, Wilkinson A, **Greenfield D**, Lawrence SA. How does hospital accreditation assist high performance in human resource management practice? *27th Australia and New Zealand Academy of Management Conference - Managing on the edge*; 4-6 December; Tasmania, Australia. 2013.

Lawrence SA, **Greenfield D**, Kellner A, Townsend K, Wilkinson A. Change in HRM processes and clinical performance in Australian hospitals: The influence of accreditation as a motivator. *27th Australia and New Zealand Academy of Management Conference - Managing on the edge*; 4-6 December; Tasmania, Australia. 2013.

Nechval KN, Nechval NA, Purgailis M, Berzins G, Krasts J, Rozevskis U, Strelchonok VF, **Moldovan M**. Technique of optimising a target value for an industrial process under uncertainty. *13th International Conference "Reliability and Statistics in Transportation and Communication"* (RelStat`13); 16-19 October; Riga, Latvia. 2013; p. 197-206.

Nechval NA, Purgailis M, Rozevskis U, Danovich V, Ribakova N, Nechval KN, Strelchonok VF, *Moldovan M*. Solving the problems of inspection planning under parametric uncertainty of underlying models. *Proceedings of 7th IFAC Conference on Manufacturing Modelling, Management, and Control*; Saint Petersburg, Russia. 2013; p. 489-94.

Robertson H, Nicholas N, **Travaglia J**, Georgiou A, **Johnson J**. Globalising the study and analysis of Alzheimer's disease: A digital earth model. *Twentieth International Association of Gerontology and Geriatrics (IAGG)*; 23-27 June; Seoul, South Korea. 2013.

Robertson H, Nicholas N, Travaglia J, Georgiou A, **Johnson J**. Vulnerability and change in the global south: A spatially informed approach. In: James P, Hudson C, Barroll-Bell S, Taing A, editors. *People and the Planet 2013: Transforming the Future*; Melbourne, Australia. 2013.

Invited Presentations

Braithwaite J. Innovations in health systems and accreditation [Keynote Address]. *National Surveyor Conference 2013*: Ambassadors of Quality; 22-25 August; Ottawa, Canada. 2013.

Braithwaite J. How clinician-managers enact their leadership responsibilities [Presentation]. *The International Health Care Conference*; 25-28 September; Sydney, Australia. 2013.

Braithwaite J The future of integrated care [Plenary]. *The International Health Care Conference*; 25-28 September; Sydney, Australia. 2013.

Braithwaite J. The Great Debate: Quality: Does it make a difference? [Plenary]. *The International Health Care Conference*; 25-28 September; Sydney, Australia. 2013.

Braithwaite J. Paediatric Research Showcase [Keynote Address]. *1st UNSW Paediatrics Research Week*; 15 November; Sydney, Australia. 2013.

Greenfield D. Healthcare accreditation: A strategy to promote safety and quality implemented around the world [Plenary]. *Medical Korea 2013 - The 4th Global Healthcare & Medical Tourism Conference*; 9-11 April; Seoul, Korea. 2013.

Greenfield D The most common reasons for failures in patient safety and what you can do about it. *Hospital Management Asia 2013* (HMA); 11-13 September; Bangkok, Thailand. 2013.

Greenfield D. What does the research evidence tells us about accreditation programs? in Yen, D., Greenfield, D., Low, L. and Chiu, A. (2013) A crash course on accreditation: what it entails, how it is done and what it means for your hospital. *Hospital Management Asia 2013* (HMA); Bangkok, Thailand. 2013; p. 11-3 September.

Greenfield D. Plenary Panel Debate: Managing a hospital is much more difficult than managing a hotel or other service company. *Hospital Management Asia 2013* (HMA); 11-13 September; Bangkok, Thailand. 2013.

Greenfield D, Hinchcliff R, Clark S, Dyer K, **Mumford V, Hogden A**, Westbrook J, B**raithwai**te J. Truths, myths and questions: the ACCREDIT project investigating if health service accreditation makes a difference to quality in general practice. *The International Health Care Conference*; 25-28 September; Sydney, Australia. 2013.

Greenfield D, Hinchcliff R, Hogden A, Mumford V, Pawsey M, Westbrook J, Braithwaite J. Accreditation workshop: Consumer participation in accreditation programs. *30th International Safety and Quality Conference: Quality and Safety in population Health and Healthcare, International Society for Quality in Health Care*; 13-16 October; Edinburgh, Scotland. 2013.

Greenfield D, Whittaker S, Fortune T. Building a collaborative network to research accreditation: Setting the agenda. *30th International Safety and Quality Conference: Quality and Safety in Population Health and Healthcar*e; 13-16 October; Edinburgh, Scotland.; 2013.

Johnson J. In safe hands: Implementing microsystem concepts in Australia: The "In Safe Hands" project [Keynote Presentation]. *10th Annual International Clinical Microsystem Festival - Scientific Day*; 1 March 2013; Jonkoping, Sweden. 2013.

Johnson J, Henriks G. Stakeholder perspectives using a microsystem lens [Workshop presentation]. *10th Annual International Clinical Microsystem Festival*; 1 March 2013; Jonkoping, Sweden. 2013.

Johnson J. Creating value and joy in the clinical microsystem [Invited Plenary]. Asian Pacific Congress on Health Leadership: Energising Healthcare, *Engaging People, Policy, and Practice;* 29 August. Australasian College of Health Service Management (ACHSM); 2013.

Sarrami-Foroushani P. A model for community engagement [Keynote Speaker]. *Consumer Engagement Strategies Workshop - Hepatitis Australia*; June; Sydney, Australia. 2013.

Short A. Revisiting cultural issues in the practice of the Bonny Method of Guided Imagery and Music (BMGIM) [Invited Presentation]. *22nd Association for Music and Imagery Conference; Imagining The World: With Music At Our Core*; 18-22 June; Vancouver, Canada. 2013.

Short A. Making a difference for the future: Bridging the clinician-researcher divide. *Ontario Shores Centre for Mental Health Sciences*; 28 June; Whitby, Ontario, Canada. 2013.

Travaglia J, **Robertson H**. Vulnerability in patient safety [Invited Panel session]. *ISQua's 30th International Conference: Quality and Safety in Population Health and Healthcare*; 13-16 October; Edinburgh, Scotland. 2013.

Grants

Key Grants

The Appropriateness of healthcare delivered to Australian children: CareTrack Kids

Funding Source: National Health and Medical Research Council Partnership Project

Investigators: Jeffrey Braithwaite, Adam Jaffe, Les White, Christoher Cowell, Mark Harris

Partner Organisations: Bupa Health Foundation, The Sydney Children's Hospitals Network, Children's Health Queensland, NSW Kids & Familes, South Australia Health, The Clinical Excellence Commission.

Duration: July 2013 – June 2016

Strengthening organisational performance through accreditation research: the ACCREDIT project

Funding Source: Australian Research Council Linkage Grant LP100200586

Investigators: Jeffrey Braithwaite, Johanna Westbrook

Partner Organisations: Aged Care Standards and Accreditation Agency; The Australian Council on Healthcare Standards; Australian General Practice Accreditation Limited; the Australian Commission on Safety and Quality in Health Care; the New South Wales Clinical Excellence Commission.

Duration: 2010 - 2015

Centre of Research Excellence (CRE) in Primary Healthcare Microsystems

Funding Source: Australian Primary Healthcare Research Institute

Investigators: Claire Jackson, James Dunbar, Paul Batalden, Jeffrey Fuller, Julie Johnson, Caroline Nicholson, Shelly Wilkerson

Duration: 1 January 2011 – 31 December 2014

Evaluating communities of practice and social-professional networks: the development, design, testing, refinement, simulation and application of an evaluation framework

Funding Source: Australian Research Council Discovery Grant

Chief Investigators: Jeffrey Braithwaite, Johanna Westbrook

Duration: 2009-2013

Metro-Regional Intellectual Disability Network Pilot Project - Evaluating and collaborative support project

Funding Source: NSW Health

Investigators: Robert Leitner, Rhoshel Lenroot, Rajiv Singh, Julie K Johnson

Duration: 1 January 2011 – 30 June 2014

Capacity Building Infrastructure Grants Program 2

Funding Source: NSW Health

Investigator: Jeffrey Braithwaite

Duration: 1 January 2010 - 30 June 2013

Patient Safety: Enabling and Supporting Change for a Safer and More Effective Health System

Funding Source: NHMRC Program Grant

Investigators: Jeffrey Braithwaite, Johanna Westbrook, Enrico Coiera, William Runciman, Ric Day

Duration: January 2009 – December 2013

Financials

Centre for Clinical Governance Research in Health

Statement of Financial Performance for the Period Ending 31 December 2013

	2013 $	2012 $
Funds		
Research Revenue[2]	$683,020.96	$455,355.72
UNSW Strategics	$42,954.92	$25,000.00
Sundry Other Revenue	$131,391.00	$234,581.00
UNSW Operating Funds[1]	$772,651.96	$723,195.83
Total Income	**$1,630,018.84**	**$1,438,132.55**
Expenses		
Payroll[3]	$1,148,532.29	$1,161,325.45
Scholarship Stipends	$73,157.13	$114,105.77
Contract & Consulting Services	$118,388.84	$57,809.91
Repairs and Maintenance	$0.00	$0.00
Consumables	$20,566.31	$26,755.77
Travel	$107,220.62	$126,926.44
Equipment	$8,175.86	$10,939.96
Other Expenses	$6,925.16	$10,786.27
Internal Expenses	$102,854.61	$218,773.19
Total Costs	**$1,585,820.82**	**$1,727,422.76**
Operating result	$44,198.02	-$289,290.21
Surplus(Deficit) Bfwd from Prior Year[4]	**$262,817.79**	**$552,108.00**
Accumulated Funds Surplus(Deficit)	**$307,015.81**	**$262,817.79**
Excludes debtors (unpaid invoices) and accruals		$4,012

Notes to the Statement of Financial Performance

1 The Centre acknowledges the University's in-kind contributions in rental, heat, light & power

2 In-kind contributions from various grants, including ARC Linkage programs, are not brought to account in this Statement.

3 The value of visiting staff, and various contributions from staff who support the Centre, are acknowledged but are also not brought into account in this Statement.

4 Adjustment made to Bfwd balance from prior year of $22,000 due to outstanding invoice not received in operating budget.

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