

Overcoming access and equity problems relating to primary health care services in rural and remote Australia

Research Outcomes and Impact

Centre of Research Excellence in Rural and Remote Primary Health Care

John Wakerman, John Humphreys, David Lyle, Matthew McGrail



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BACKGROUND

Overcoming access barriers to primary health care is crucial to achieving equitable health outcomes for Australians living in rural and remote areas. To address this issue, in 2011, the *Australian Primary Health Care Research Institute* established the *Centre of Research Excellence in Accessible and Equitable Primary Health Service Provision in Rural and Remote Australia* (CRE). This CRE is a collaboration between Monash University School of Rural Health in Bendigo and Churchill, the Centre for Remote Health (a joint centre of Flinders University and Charles Darwin University) in Alice Springs, and the University of Sydney Department of Rural Health in Broken Hill.

The CRE aimed to develop:

- a better understanding of health behaviour relating to primary health care service utilisation in rural and remote Australia;
- better measures of access to guide resource allocation relating to primary health care in small rural and remote communities;
- a comprehensive framework for evaluating the impact of rural and remote primary health care services on equity of health outcomes; and
- evidence-based models of sustainable primary health care for different rural and remote contexts.

RESEARCH OUTCOMES & IMPACT

What follows summarises some of the key outcomes and impacts achieved by the CRE. The Final Report of the CRE is available on our website: www.crerrphc.org.au

Stream One: the geography of access and equity

The Stream One research program, led by Dr Matthew McGrail, generated important new evidence relating to three vitally important aspects of access and equity:

1. The development of a national Index of Access of Primary Health Care

Strong support has been received for the new Index of Access and its potential application within rural health service planning and resource allocation decision-making. A copy of the Discussion Paper and Evaluation Summary Report of the Index of Access is available on the CRE website: www.crerrphc.org.au/node/12.

The following article illustrates its application for service planning and allocation of health resources:

- McGrail MR, Russell DJ & Humphreys JS (2016). Index of Access: a new innovative and dynamic tool for rural health service and workforce planning, *Australian Health Review*, online early: <http://www.publish.csiro.au/AH/AH16049>



Matthew McGrail

2. New empirical information of patterns of utilisation of health services

A survey of five small rural communities varying in geographical location was undertaken to ascertain residents' usual behaviour with respect to use of primary health care services. The results provided vital data underpinning the Index of Access model and resulted in several publications.

- McGrail M, Humphreys JS & Ward B (2015). Accessing doctors at times of need – measuring the distance tolerance of rural residents for health-related travel, *BMC Health Services Research*, 15(212): 1-9.

3. The Modified Monash Model - a 'fit-for-purpose' classification to guide the allocation of workforce incentives

Responding to an *Australian Senate Enquiry into Health Services and Medical Professionals in Rural Areas*, the CRE developed a new improved classification to guide rural and remote incentives programs. The new **Modified Monash Model** classification is based on what rural doctors actually do in differing geographical contexts. The classification was implemented by the Commonwealth Department of Health for rural GP retention incentive policies in 2015, and now underpins many national rural health programs such as the *Dental Relocation and Infrastructure Support Scheme*, the *Bonded Medical Places Scheme*, the *Aged Care Viability Supplement's Remoteness Classification*, and the *Rural Locum Assistance Program (Rural LAP)*.

- Humphreys JS, McGrail M, Joyce C, Scott A & Kalb G (2012). Who should receive recruitment and retention incentives? Improved targeting of rural doctors using medical workforce data, *Australian Journal of Rural Health*, 20: 3-10.

FURTHER INFORMATION CONTACT:

Lisa Lavey, Research Administration Manager, Monash University School of Rural Health

Telephone: 03 5440 9082

Email: lisa.lavey@monash.edu

Website: www.crerrphc.org.au

RESEARCH OUTCOMES & IMPACT continued

Stream Two: Benchmarking the impact of rural & remote on primary health care practice

Ensuring equitable resourcing of health services is critical for achieving equitable health outcomes, CRE researchers, led by Professor John Wakeman, have developed benchmarks for the workforce and resource requirements of primary health care services in differing geographical contexts.

1. Defining core primary health care services for rural and remote Australia

A comprehensive systematic literature review ascertained what primary health care services are required to ensure equitable access to health care in communities differing in size and geographical location. The resulting publication quickly achieved 'highly accessed' status.

- Carey T, Wakeman J, Humphreys JS, Buykx P & Lindeman M (2013). What primary health care services should residents of rural and remote Australia be able to access? A systematic review of 'core' primary health care services, *BMC Health Services Research*, 13(178): 1-8.

2. Primary health care services that rural and remote communities expect to access

This study identified a core basket of primary health care services that consumers in rural and remote communities expect to access. The evidence has contributed to a more systematic approach to primary health care service planning and resource allocation for improving rural and remote health outcomes.

- Thomas SL, Wakeman J & Humphreys JS (2014). What core primary health care services should be available to Australians living in rural and remote communities? *BMC Family Practice*, 15(143): 1-9.

3. Benchmarking primary health care services in rural and remote communities

This study of small rural and remote communities investigated what funding is required to ensure equitable access to sustainable, high quality health care irrespective of geographical remoteness. This research provides a better basis for funding primary health care services taking into account both safety and equity requirements.

- Thomas S, Wakeman J & Humphreys JS (2017). What does it cost to provide equity of access to high quality comprehensive primary health care in rural Australia: A pilot study, *Rural and Remote Health*, (in press).



John Wakeman

Stream Three: Models of Primary Health Care

Research evaluation of several primary health services, especially mental health and aged care services, was undertaken, specifically targeting improved equity in health outcomes associated with integrated models of care. Led by Professor David Lyle, common findings across the case-studies demonstrated the importance of ensuring the key service requirements of governance, leadership and management; adequate funding; infrastructure; service linkages; and workforce. Of crucial importance too is community consultation, engagement and ownership.

- Reeve C, Wakeman J & Humphreys JS (2015). Strengthening primary health care: achieving health gains in a remote region of Australia, *The Medical Journal of Australia*, 202(9): 483-487.

A detailed examination of one innovative model of care for mental health built on extensive work investigating rural emergency mental health access utilising telehealth, integrated models of care, and with the Royal Flying Doctor Service and rural GPs.

- Saurman E, Johnston J, Hindman J, Kirby S & Lyle D (2014). A transferable tele-psychiatry model for improving access to emergency mental health care, *Journal of Telemedicine and Telecare*, 20(7): 391-399.



David Lyle

Longitudinal evaluation of the Elmore Primary Health Service



L-R: Deborah Russell, John Humphreys, Lisa Lavey, Rohan Jenner and Kathy Tuohey

Staff from the CRE have been evaluating the performance, sustainability and quality of health care provided by the *Elmore Primary Health Service* (EPHS). Key health indicators show that the EPHS is performing at a very high level in delivering accessible, comprehensive, high quality primary health care, with health promotion, prevention of ill-health, delivery of acute care, after-hours and follow-up rehabilitation available to local residents.

The study has resulted in 7 peer-reviewed publications and 6 national and international conference presentations. The research findings have benefited the health service immensely through contributing to quality assurance, informing its expansion and improvements within the service itself. The EPHS's networked model of service provision (see reference below), positions it as a role model for other small rural communities seeking to ascertain how to maintain the provision of high quality primary health care services in a small rural community.

These outcomes demonstrate the success of an effective long-term research partnership between staff from the EPHS, members of the Elmore community and Monash University.

- Russell DJ & Humphreys JS (2016). Meeting the primary healthcare needs of small rural communities: lessons for health service planners. *Rural and Remote Health*, 16: 3695.

RESEARCH CAPACITY BUILDING

PhD Training

PhD training has helped to better understand priority health issues in rural and remote communities:

- **Deborah Russell**, PhD, Monash University, 2014. *The patterns, determinants and measurement of rural and remote primary health care workforce turnover and retention.*
- **Emily Saurman**, PhD, University of Sydney, 2015. *Using technology to improve access to emergency mental health care in rural and remote Australia: an evaluation of the Mental Health Emergency Care-Rural Access Program (MHEC-RAP).*
- **Marita Chisholm**, PhD, Monash University, 2016. *Access to dementia care and support services in rural Victorian communities. The experiences of people with dementia and their carers.*
- **Carole Reeve**, PhD, Flinders University, 2016. *Closing the Gap in Rural and Remote Areas: the key principles of effective strategies.*

A fifth post-graduate student is about to submit his thesis for examination:

- **Michael Tyrrell**, PhD, Flinders University. *Mercenaries, missionaries or misfits? The key motivations of the health practitioner who stays the distance in the bush.*

All CRE PhD graduates continue to contribute to rural and remote health research across Australia.

Postdoctoral profile: Dr Deborah Russell

Deborah continues her research in the rural and remote primary health care workforce area at Monash University School of Rural Health. She is a lead researcher for an Australian Research Council study on 'The impact and cost of short-term health staffing in remote communities', a co-investigator on the *Elmore Primary Health Service Longitudinal Study*, and an important member of the Centre of Research Excellence in Medical Workforce Dynamics (*Medicine in Australia: Balancing Employment and Life: MABEL*) team with staff from the University of Melbourne.



Early Career Research Capacity Building Program

A number of primary health care clinicians from local health services across rural and remote Australia have been mentored and supervised in the early stages of research. They undertook research within their own health service which has contributed to health service improvements and built their local research capacity. Several recent publications have resulted from this program:

- Meade C, Ward B & Cronin H (2016). Implementation of a team model for RACF care by a general practice, *Australian Family Physician*, 45(4): 218-222.
- Roberts DP, Ward BM, Russell DJ & O'Sullivan BG (in press). Accessibility and outcomes from a rural diabetes nurse-educator led self-management program, *Australian Journal of Advanced Nursing*.

ASSISTING FUTURE COLLABORATIONS

Research Impact Database

CRE staff developed a *Research Impact Database* to measure the impact of evidence generated by research based on the framework suggested in the journal article (below) written by CRE investigators. As well as publishing 180 peer-reviewed articles, an additional 400+ forms of research impact have been attributed to the CRE activities. This research translation resource, designed by Lisa Lavey, has attracted major interest from national and overseas universities and research organisations, and is available under a licence agreement with Monash University *free of charge*.

- Buykx P, Humphreys JS, Wakeman J, Perkins D, Lyle D, McGrail M and Kinsman L (2012). "Making evidence count" – A framework to monitor the impact of health services research, *Australian Journal of Rural Health*, 20(2); 51-58.

Establishment and Management of Multi-Institutional Collaborations

Lisa Lavey (CRE Project Manager), in association with other APHCRI research staff, was instrumental in documenting how to manage research across national collaborations efficiently and effectively. The document '*Establishment and Management of a Multi-Institutional Centre of Research Excellence: Tips for New Players*' was presented at the 17th Australasian Research Management Society 2015 Conference in Singapore. A peer-reviewed article is currently in press.

- Spooner C, Lavey L, Mukuka C & Eames-Brown R (2016). Multi-institution Research Centers: Planning and Management Challenges, *Journal of Research Administration*, 47(2): 32-48.

Further information on these resources is available at: www.crerrphc.org.au/node/75