Centre of Research Excellence in in Rural and Remote Primary Health Care

Summary of accomplishments
Increasing knowledge and influencing policy

National Advisory Committee Meeting

13 August 2014

MONASH University
Medicine, Nursing and Health Sciences

**Broken Hill University
Department of Rural Health**

Centre for Remote Health
A joint centre of Flinders University and Charles Darwin University

Centre of Research Excellence in Rural and Remote Primary Health Care

Funded by the

Australian Primary Health Care Research Institute (APHCRI)

2011-2014

Background & rationale

- Good health is a basic right of all Australians

- Health status is worse in rural and remote areas and parallels socio-economic disadvantage

- Workforce shortage and maldistribution are key issues in rural and remote areas

- Problems of access and existing inequities contribute to poorer health outcomes

- Problems are most acute for residents of small isolated communities

Today's presentation:
## Summary of Accomplishments

- **Stream 1:** Develop a better understanding and improved measure of access to PHC services

- **Stream 2:** Develop an evaluation framework for monitoring impact of PHC services on access and equity of health outcomes

- **Stream 3:** Develop and evaluate appropriate sustainable PHC service models in priority health areas

- **Research capacity building program**

- **Project management**

- **Knowledge exchange progress**

Stream 1
Measuring access to PHC

1. **National** index of access for non-metropolitan Australia

2. Constructed using **smallest** possible geographical unit

3. **Primary health care** providers (GPs, Nurses, Allied Health)

4. Uses **current, accurate** data and latest methodologies

5. Capable of **adjustment** to reflect changes

6. Undertaking **validation** and sensitivity assessment

Conceptual framework

Availability | Proximity | Health Needs
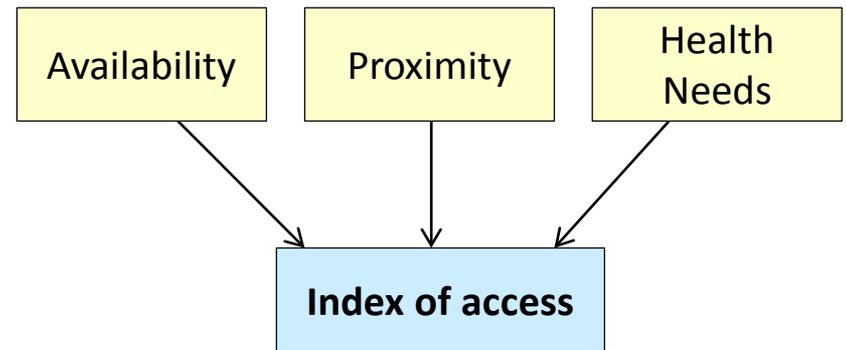
Index of access

Two-state floating catchment method

Step 1: Calculate service catchments

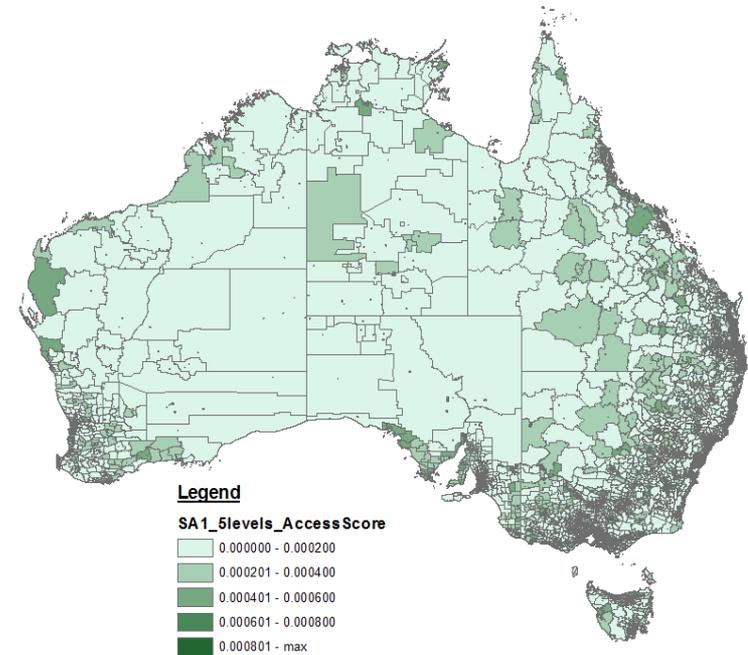$$R_j = S_j / \sum_{k \in [d_{jk} < d\max]} P_k * f(d_{jk})$$

Step 2: Calculate population catchments

$$A_i = \sum_{j \in [d_{ij} < d\max]} R_j * f(d_{ij})$$

The 'new' national index of access
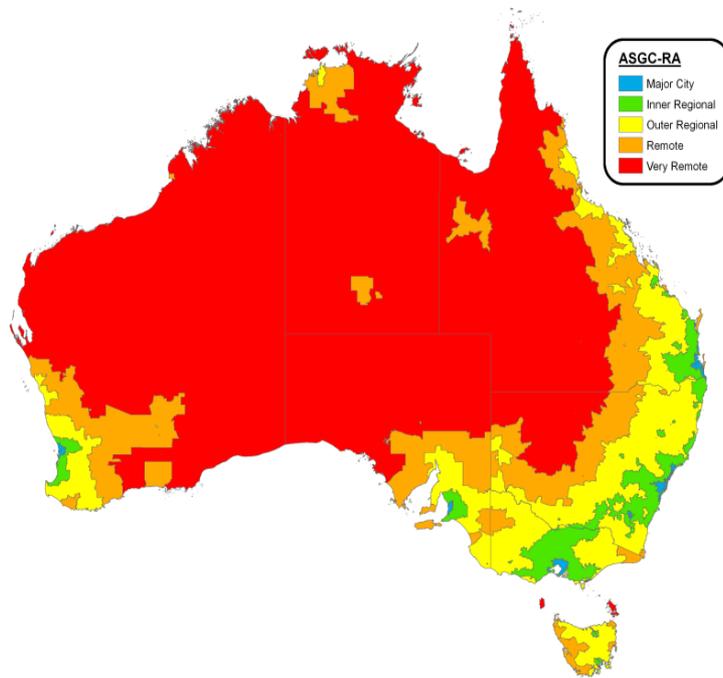
Current

Proposed

Stream 1
Achievements

- **Development of a new national-level Index of Access**
  - ➢ Process - demonstrate deficiencies of existing approaches; audit data availability; empirical research to underpin more appropriate measure; develop methodology.
  - ➢ Products - 3 papers submitted, 2 presentations, main paper and non-technical working paper drafted.

- **Monash model (Mason review, Senate enquiry)**

- **NHMRC Career Development Fellowship** (McGrail)

- **2 PhDs** – Russell (2014); Chisholm (2015)

Stream 2 Progress

- **Core PHC services**
  - ➢ **Defined** - Care of the sick & injured; Mental health, Maternal and child health; Allied health; Sexual & reproductive health; Rehabilitation; Oral health; Public health & illness prevention.
  - ➢ **Systematic review** published BMCHSR – highly accessed
  - ➢ **Core service paper** under review BMCPC
  - ➢ **Implementing core services paper** in development

- **Funding benchmarks**
  - ➢ Australia-wide rural and remote fieldwork under way

- **PHC evaluation framework**
  - ➢ Paper documenting adaptation of Elmore framework in remote areas in preparation

Stream 2 Achievements

- Thomas et al MJA cost-effectiveness paper – media impact

- Gaydor-White et al MJA funding benchmark paper

- Impact of community participation on PHC; J Primary Health

- Fitzroy Valley publications
  - Community process
  - Impact
  - Evaluation framework
  - PhD enrolment
- PhDs: Tyrrell (2014), Reeve (2015)

Evaluations:

- **Mental health emergency care**
  - ➢ 3 papers published, 2 in preparation; PhD on track

- **RFDS Studies (NSW)**
  - ➢ Diabetes study finalised, paper submitted
  - ➢ New study on clinical handover under ethics review

- **Fitzroy Valley PHC re-orientation (WA)**
  - ➢ See stream 2

- **Youth suicide and youth services mapping in central Australia**
  - ➢ Completed

- **Patient-led appointments in routine mental health practice (NT)**
  - ➢ Completed

Overarching Stream 3 paper:

- In preparation
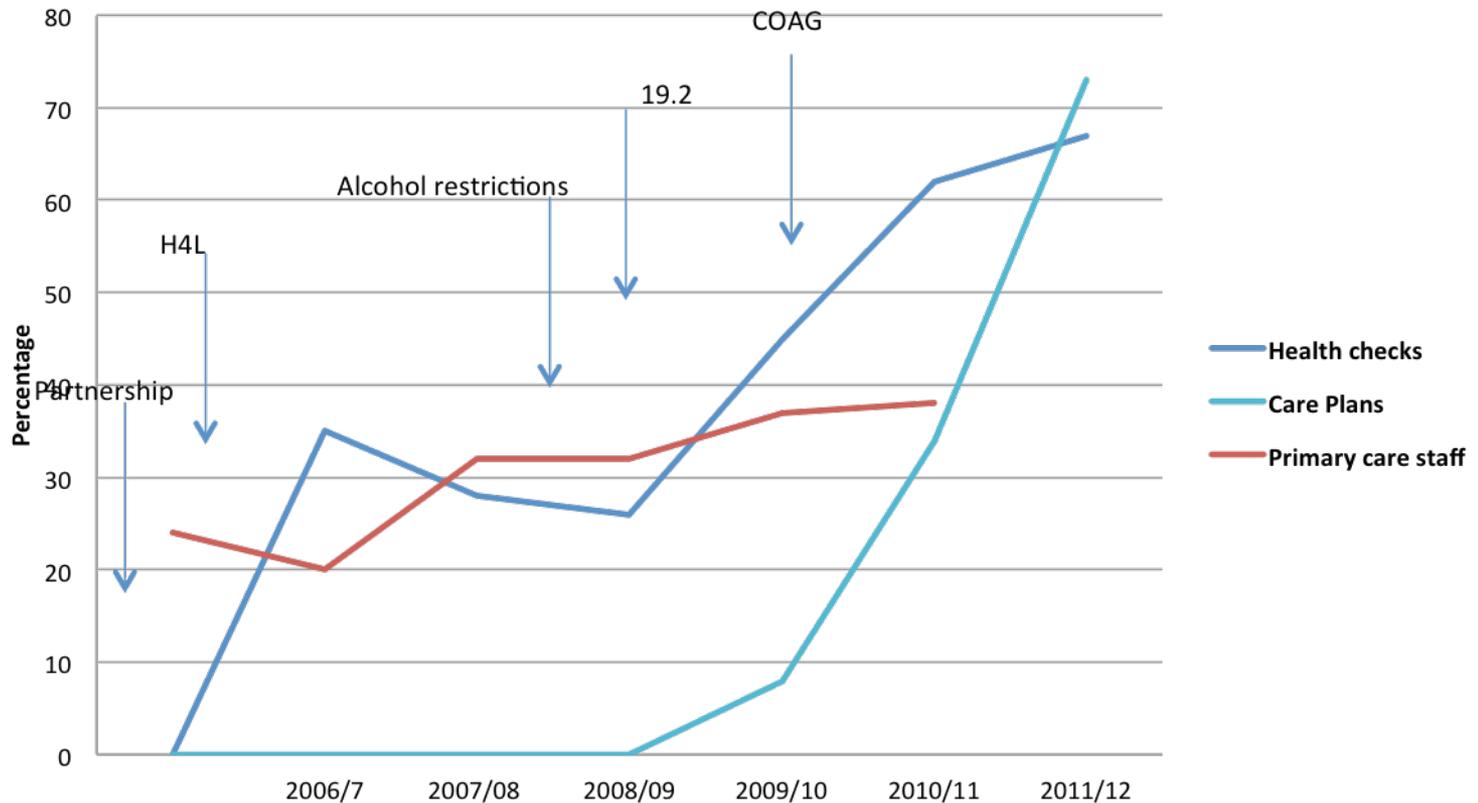
Stream 3 Achievements

- ## Project Outputs
  - ➤ All projects in write up and dissemination phases
  - ➤ Most have already published in referred journals
  - ➤ Formal and informal translation activities, including presentations and educational activities
  - ➤ PHD Saurman (2014)

- ## New Projects
  - ➤ Service Learning Evaluation Plan (unsuccessful ARC Linkage) (multi-site)
  - ➤ RFDS Handover Project (NSW)
  - ➤ Palliative Care Service Evaluation (NSW)
  - ➤ NHMRC Kimberley Carer Support Project (WA)
  - ➤ Developing a nutrition screening tool for older Aboriginal people (NT)
  - ➤ Realist review of telehealth in PHC
  - ➤ Rural access to drug and alcohol

Stream 3 example: Strengthening PHC & improving access in the Fitzroy Valley

Research Capacity Building Progress

Centre of Research Excellence in Rural and Remote Primary Health Care

- **PhD Students**
  - Deb Russell submitting PhD August 2014
  - Emily Saurman has three papers published (minimum requirement for PhD) and on track to submit by end of year/early 2015
  - Marita Chisholm on track to submit March 2015
  - Michael Tyrrell on track to submit by end of year

- **Early Career Researchers**
  - 7 of 8 (88%) remain in the program
  - 4 have completed, 2 in write up phase and 2 still yet to complete data collection
  - 3 presented findings at the 2014 PHC Research Conference
  - 1 presented findings at 2014 Australian Institute of Family Studies Conference

- **Evaluation of Early Career Researcher Program**
  - Ethics approval granted
  - Participant interviews scheduled

Research capacity building Achievements

- **2014 Primary Health Care Research Conference presentations**

  ➢ Carole Meade " A General Practice Model of care in residential aged care facilities"
  ➢ Di Roberts "A clinical Audit of a diabetes self-management program in rural Victoria"
  ➢ Laurencia Grant "Analysis of secondary data on Aboriginal Youth Suicide and referral pathways"

- **2014 Australian Institute of Family Studies Conference presentation**

  ➢ Fiona Tipping "Pacific Islander parents' perceptions of school readiness"

Research Capacity Building Achievements

Promotions

- John Humphreys now has Emeritus Professor status

- Matthew McGrail promoted to Senior Research Fellow

- John Wakerman promoted to Associate Dean, Flinders Northern Territory

- Tim Carey promoted to Professor

- Melissa Lindeman promoted to Associate Professor

- Mike Jones promoted to Professor

- David Perkins promoted to Professor, University of Newcastle

- Leigh Kinsman promoted to Professor, University of Tasmania

- Penny Buykx, Senior Research Fellow, University of Sheffield

Project Management

- Guidelines to assist new CREs in their establishment and management
- APHCRI grant to undertake research relating to multi-site collaborations
- Assistance and advice to other CREs and organisations
- Research Impact Database

Knowledge transfer matrix to measure impact of CRE

Centre of Research Excellence
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Primary Health Care

Broad area of impact	Specific areas of impact	Key audience Stakeholders	Evidence	
			Producer push	**User pull**
Research-related impact 'Advancing Knowledge'	➤ New knowledge ➤ Capacity building	➤ Researchers ➤ Educators ➤ Media	➤ **Publications** ➤ **Media releases** ➤ **Grants** ➤ **PhDs**	➤ **Access hits & citations** ➤ **Media interviews** ➤ **Secondary circulation**
Policy impact 'Informing decision making'	➤ Evidence base ➤ Influence in decision-making	➤ Policy makers ➤ Politicians ➤ Professional bodies	➤ **Policy briefs** ➤ **Presentations**	➤ **Rapid responses DoHA)** ➤ **Decision maker awareness & use (DoHA/services)** ➤ **Invited policy papers**
Service impact 'Improving health & health systems'	➤ Evidence-based practice ➤ Quality & safety ➤ Efficiency ➤ Cost effectiveness	➤ Managers ➤ Health workforce ➤ Consumers	➤ **Evaluation reports** ➤ **Practice guidelines** ➤ **Recommended models**	➤ **Decision maker awareness & use (RDA)** ➤ **Board membership**
Societal impact 'Creating broad social & economic benefit'	➤ Health literacy ➤ Health behaviour ➤ Health status	➤ Consumers ➤ advocates	➤ **Media releases** ➤ **Evidence of changes**	➤ **Website hits** ➤ **Media coverage (Croakey, OZ Doc, ABC)** ➤ **Consumer surveys**

Examples of research impact on policy

- **Example of how our work is being used to advise government drawn from external people and copied to CRE for information:**

  Advice to Senior staff at Health Workforce New Zealand, National Health Board, Ministry of Health, New Zealand in response to an enquiry relating to rural health workforce issues:

  "The expert on this topic is…… from the CRERRPHC. He and his colleagues have shown that retention is better if doctors are self-employed and have also shown that doctors earn more if they work in areas where the median income is higher".

Examples of research impact on policy

Always difficult to ***attribute*** policy change to research evidence but the CRERRPHC is ***contributing*** to workforce policy

- The committee was impressed with the comprehensive nature of the model….and….is supportive of the methodology and data utilised" **(Australian Government Senate Enquiry, 2012)**

- "The enhancement….is a valuable one…..based on reasonable evidence derived from data generated through the MABEL Study….A modification to the "model" is recommended as the approach most likely to provide positive enhancements to current systems." **(Mason Review, 2012)**

- "The model provides a sound and practical basis on which to move forward, and the RDAA has joined other stakeholders – including United General Practice Australia – in supporting this model in-principle." **(RDAA, 2013)**

Examples of "highly accessed" Journal Articles

- **Carey T, Wakerman 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*. **(Highly accessed)**

- **Bath J & Wakerman J** (2013). Impact of commnity participation in primary health care: what is the evidence?, *Australian Journal of Primary Health,* online. http://dx.doi.org/10.1071/PY12164 **(Ranked 1st: Most Read)**

- **Saurman E, Lyle D, Perkins D** & Roberts R. (2013). Successful provision of emergency mental health care to rural and remote NSW - an evaluation of the Mental Health Emergency Care-Rural Access Program, *Australian Health Review,* 38(1): 58-64. **(Ranked 20th: Most Read)**

Summary of CRERRPHC Research Activities

CRERRPHC Research Activity	Producer Initiated	User Initiated
Journal Articles: ➢ Published (43) ➢ Accepted for publication (4) ➢ Submitted for review (6)	53	
Published books/book chapters	6	
Published Reports	1	2
Full-Refereed Conference Publication	2	
Conference Presentations	42	9
Stakeholder Presentations	10	29
Evidence of uptake/usage: Inc. Invitations, meetings, policy, requests, telephone/email enquiries		54
Referee/Reviewer activities		56
CRERRPHC Visitor presentations	17	
Awards/Achievements	13	3

Summary of CRERRPHC Research Exposure in Media

CRERRPHC Research Activity	Producer Initiated	User Initiated
Media	27	64
Website hits – Unique Visitors (7 August 2014) *Last recorded (20 Feb 2014) – 10,205*		13,291
Twitter **followers** (7 August 2014) *Last recorded (20 Feb 2014) : 88*		132
Tweets (31 July 2014) *Note: Re-tweets of some of our CRERRPHC tweets have reached over 20,000 followers per tweet*	139	
CRERRPHC **Newsletter** distribution list (paper copy & electronic)	146	55

Future and ongoing Research

Broken Hill University
Department of Rural Health

Future Research

- Index of Access

- Elmore Primary Health Service – longitudinal evaluation

- Student-led clinics model

- FIFO

- Power in rural health

2007 - 2014

- "ending the blame game"

- National PHC Policy

- NHHRC

- ANPHA

- National Health Care Reform Agreement 2011
  - ➢ 67 MLs, 137 LHNs
  - ➢ Defined responsibilities for acute & primary care
  - ➢ IHPA, NHPA, ACSQHC

- May 2014:
  - ➤ States responsible for hospitals without planned increases in funding
  - ➤ Smaller number of PCNs to replace MLs
  - ➤ GP co-payments
  - ➤ Review and re-contracting of GP training
  - ➤ ANPHA, IHPA, NHPA, ASQC, HWA, GPET into DOH
  - ➤ End of NHRA after 2016/17

NAC policy top of the pops 2011-2014

- Engage & evaluate MLs – locally & AMLA

- Knowledge transfer – especially community, policy, "getting the information out there"

- Research capacity building

- Workforce, infrastructure & models of care

- E-health, telehealth, NBN

- Aged care, disability, dementia, NDIS

Current Policy Environment

- What are the new critical issues and policy directions that are different to when we started?

- What is the political framework?

- What other policy relevant issues are there?

- Future directions for research?

- Feedback from all members of the National Advisory Committee

Conclusion

Through its **activities** the CRE has:

- investigated key policy issues and problems;
- produced empirical evidence across multiple sites, states and institutions;
- engaged policymakers and service providers in the process; and
- generated important new evidence for policy.

The CRE has increased **research capacity**:

- Service staff, students on placement, PhDs, post-docs, and promotion of staff to leadership pathways; and
- Critical mass across rural sites, with other CREs