The rural & remote health policy impasse:
Why hasn’t research evidence generated policies to improve rural & remote health services?
Overview

Setting the scene
  John Humphreys

What do we know?
  John Wakerman

Influencing policy & practice – Success stories
  John Humphreys, John Wakerman, Sue Lenthall, Paul Worley

Beyond the research impasse – Discussion & Summary
  Bob Wells, panel and delegates
Setting the scene

1. What is the rural health problem?
2. We need more research – DO WE? (If so, what sort of research?)
3. Maybe our translation of evidence into policy is not working?
What is the rural & remote health problem?

1976

• Facilities & services
• Workforce
• Transport
• Indigenous health

(Hospital & Health Services Commission, 1976: Rural Health in Australia, Canberra)
The solution?

1. We need to understand rural and remote health problems and why they persist
2. We need to identify evidence-based policies and programs to resolve the problems
3. We need the will and resources to implement and evaluate these policies and programs
1. Understanding rural and remote health

UDRH research 2013

- 220 peer-reviewed articles
  - 18% health workforce
  - 29% clinical & health services
  - 40% population health
  - 14% other

- 40% rural/remote health
The rural and remote context is different

1. Geography - Small settlements & vast distances

2. Poorer health status
   - Elevated mortality
   - Higher incidences of diseases
   - Higher rates of hospitalisation

3. Socioeconomic disadvantage
   - 33 of the 37 poorest electorates are rural or remote

4. Social & geographical diversity
   - Lifestyle differences
   - Inappropriate mainstream programs
2. Identifying evidence-based policies & programs

- UDRH, RCS, RHMTP
- JFS, MRBSS, RVTS
- RWA
- MPS
- MSOAP
- GPRIP
- etc, etc, etc
3. The will and resources to implement specific rural and remote policies

Currently many specific rural and remote health programs spending in excess of $1.5 billion per annum (2013-14 total expenditure on health was $155 billion)
So – are the planets aligned?

What difference have all these initiatives made to bringing about improvements in the health status and life chances of Australians living in rural and remote communities?

First, let us consider the wealth of rural and remote health research.
What do we know about effective, sustainable rural & remote Primary Health Care services?
What PHC service models work & where do they work?

| Model category              | Health service examples                                                                 | Rationale for model                                                                                                                                 |
|-----------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------Adam 2008)                                                                                                                                         |
| RURAL                       | Discrete services                                                                      | • Walk-in/walk-out models  
|                             | • Viable models                                                                       | • University clinics  
|                             | • Multipurpose services                                                                | Discrete health services exist where population catchments meet essential service requirements (although some supports may be needed to address workforce recruitment and retention)  
|                             | Integrated services                                                                    | • Shared care  
|                             | • Coordinated care trials                                                              | • Coordinated care trials  
|                             | • Primary health care teams                                                            | • Primary health care teams  
|                             | • Multipurpose services                                                                 | • Multipurpose services  
|                             | Comprehensive primary health care services                                             | Access to services in small, isolated, high-need communities is critical where few alternative ways of delivering appropriate care exist. Community participation and service flexibility are essential to meet local needs and circumstances  
|                             | Outreach services                                                                      | • “Hub and spoke” models  
|                             | • Visiting services                                                                    | • Visiting services  
|                             | • Fly-in/fly-out models                                                                | • Fly-in/fly-out models  
|                             | • Telehealth/telemedicine                                                               | • Telehealth/telemedicine  

Context: rural–remote continuum

RURAL  
Characterised by larger, more closely settled communities

REMOTE  
Characterised by small populations dispersed over vast areas

Flinders UNIVERSITY
Why do they work?

- **Essential service requirements:**
  - Governance, management and leadership
  - Infrastructure
  - Linkages
  - Funding
  - Workforce supply

  *underpinned by*

- **Macro-scale environmental enablers:**
  - Supportive policy
  - Federal-state relations
  - Community readiness.

What services should rural and remote residents expect to access?

- Care of the sick and injured
- Mental health services
- Maternal and Child Health
- Allied health
- Sexual and reproductive health
- Rehabilitation
- Oral health
- Public health/illness prevention

(Carey et al 2013 BMCHSR, Thomas et al 2014 BMCFP)
Getting the right services in the right place  
(Thomas et al 2015 Int J Health Equity)

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*Consensus refers to >80% of Delphi panelists agreeing.
What should these services cost?

Total cost per capita $2239 - $7292

Cost of resident services = $1,251,893 + ($1699 X population) per annum

Cost of resident & visiting services = $1,414,709 + ($2130 X population) per annum

(Wakerman et al BMCFP 2017)
Workforce retention benchmarks

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Rural (≤10,000 population)</th>
<th>Remote</th>
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<tr>
<td></td>
<td>Median survival</td>
<td>12-month survival probability</td>
<td>24-month survival probability</td>
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<tr>
<td>Nurse</td>
<td>5</td>
<td>0.80</td>
<td>0.67</td>
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<tr>
<td>Doctor</td>
<td>3</td>
<td>0.75</td>
<td>0.60</td>
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<tr>
<td>Allied health professional</td>
<td>3</td>
<td>0.75</td>
<td>0.60</td>
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<tr>
<td>Aboriginal health worker</td>
<td>3</td>
<td>0.75</td>
<td>0.60</td>
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<tr>
<td>Manager</td>
<td>5</td>
<td>0.80</td>
<td>0.67</td>
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Russell et al AHR 2013
## Workforce instability

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<tr>
<th></th>
<th>Annual turnover (primary)</th>
<th>Annual turnover (secondary)</th>
<th>Survival at 12 months (benchmark)*</th>
<th>Median survival (benchmark)</th>
</tr>
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<tbody>
<tr>
<td>RAN</td>
<td>148%</td>
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<td>19% (78%)</td>
<td>0.31 years (3.5 years)</td>
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<tr>
<td>AHP</td>
<td>79.4%</td>
<td></td>
<td>27% (75%)</td>
<td>0.46 years (3.0 years)</td>
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<tr>
<td>RAN + AHP</td>
<td>128%</td>
<td>66%</td>
<td>20%</td>
<td>0.34 years</td>
</tr>
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</table>

Russell et al  HRH 2017
*Russell et al AHR 2013
Workforce retention strategies – what works?

2. Infrastructure
3. Realistic remuneration – packaging, retention bonuses
4. Effective organisation – leadership, management, induction
5. Professional environment – mentoring, CPD, scholarship
6. Social, family & community support

Buykx et al AJRH 2010

7. Long term: health professional pathways
Is community participation important?

Impact of community participation in primary health care: what is the evidence?

Jessica Bath A,B,C and John Wakeman A,B

A Centre of Research Excellence in Rural and Remote Primary Health Care, PO Box 666, Bendigo, Vic. 3552, Australia.
B Centre for Remote Health, a joint centre of Flinders University and Charles Darwin University, Alice Springs, PO Box 4096E, Alice Springs, NT 0871, Australia.
C Corresponding author. Email: jess.bath@gmail.com

Community participation in health service reform: the development of an innovative remote Aboriginal primary health-care service

Monitoring & evaluation

  - Performance, sustainability, quality
    (Tham et al 2010 AJRH, Tham et al 2011 BMCHSR, Buykx et al 2012 BMCHSR)

- Remote evaluation framework
  (Reeve et al 2015 MJA)
Improved PHC access = better outcomes, less cost

• NT Indigenous diabetics in remote areas 2002-11
• Increased access to PHC resulted in:
  - Decreased hospitalizations X 5
  - Decreased death rates X 3
  - Decreased years of lost life X 5
  - Decreased costs - $248/$739 VS $2915
    (Thomas et al MJA 2014)

• Savings with increased access for 5 CDs: $125m pa
  (Zhao et al BMCHSR 2014)
Recall the rural & remote health problem?

1976

• Facilities & services
• Workforce
• Transport
• Indigenous health

(Hospital & Health Services Commission, 1976: Rural Health in Australia, Canberra)
And what about today?
Similar but different!

1976
• Facilities & services
• Workforce
• Transport
• Indigenous health

2018
• Funding & infrastructure
• Workforce supply
• Access to health services
• Indigenous health

(Hospital & Health Services Commission, 1976: Rural Health in Australia, Canberra)
Why are these problems so persistent? The research-policy impasse: translation of evidence into policy is not working

- “There is nothing a Government hates more than to be well-informed; for it makes the process of arriving at decisions much more complicated and difficult” (John Maynard Keynes)

- “Those of us who work at the rural coal-face are aware of the research that is being done. However, there are levels of administration above the coalface where the voice of the researcher is not heard. These are the sounds of silence” (Col Owen, 1993)

- “Bureaucrats … seem to be very closed to the fact that there was any problem with the existing system” (Senator, 2012)

BUT THERE ARE SOME SUCCESSES
Four examples of success in influencing policy and practice

1. Resource distribution
   • Modified Monash Model  John Humphreys
2. Education & training resources
   • CARPA STM  John Wakerman
3. Safe workplace practice
   • Back from the Edge  Sue Lenthall
4. Rural-based medical education
   • The Riverland model  Paul Worley
Modified Monash Model – the problem

Rural medical workforce retention - Who should get what incentives?

- **Background:**
  - Expensive program ($134 million package)
  - Based on ASGC inequitable and not working

- **Stakeholder concerns:**
  - Controversy over who should get what
  - Lack of evidence that retention grants work

- **Research:**
  - How does rural practice differ?
  - Why does knowing what doctors do where assist workforce policies?

- **Policy recommendation:**
  - Community size combined with remoteness is a fairer basis for allocation than existing ASGC scheme

## Modified Monash Model – the results

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<tr>
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<th>Statistical Test</th>
<th>ASGC-RA</th>
<th>New 13-level classification</th>
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<td>42.9</td>
<td>121.3</td>
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<td>Time-off</td>
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<td>11.8</td>
<td>6.0 (p=0.014)</td>
<td>5.0 (p=0.025)</td>
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<td>Partner Employment</td>
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<td>Schooling</td>
<td>$\chi^2(1)$</td>
<td>68.6</td>
<td>141.2</td>
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All p-values are <0.001 unless specified

**PROBLEM SOLVED!** The proposed new scale is:

- far more sensitive to important differences
- a better basis for equitable resource allocation based on what doctors do and the impact of the setting on work & life
Modified Monash Model – the timeframe to adoption

- 2009 - Submissions about the inequities of using ASGC-RA
- **2011 - Research evidence produced and published**
- 2011 - Submission to the Senate Committee
- 2012 - Presentation to Senate Committee
- 2012 - Presentation to DoHA and further submission
- 2013 - Mason Review
- 2013 - Presentation to DoHA
- 2013 - Presentation to Technical Advisory Committee
- 2013 - Change of Australian Government
- 2014 - GPRIP Independent Advisory Panel
- 2015 – MMM adopted by Australian Government
Modified Monash Model – lessons learned

• **Key ingredients for success:**
  - Rigorous research evidence
  - Transparency – validation and amplification
  - Relationships with end-users – trust and credibility
  - Multiple modes of communication

• **Lessons for the future:**
  - Timing and linking evidence to the government agenda – ‘research awaiting the problem’ rather than ‘the problem waiting for the research’!
  - Patience and persistence
CARPA Standard Treatment Manual

Remote Health context

- High remote staff turnover
- High burden of disease
- Mobile population
- Professional isolation
- Inadequate preparation/training
- Extended scope of practice

*Need for consistent best clinical practice for remote areas*
CARPA Standard Treatment Manual

- Clinical & contextual relevance
- Credibility
- High acceptability, high utilisation, high compliance
- Policy
- Orientation & training
- Legal safeguard
• Agreed problem
• Effective solution
• Rigorous review by content experts
• Context experts
• Embedded in policy, training & legislation
• BY THE END-USERS FOR THE END-USERS
Reducing and Preventing Occupational Stress

To improve our understanding of workplace stressors in the remote nursing workforce by:

• Describing stressors and measuring levels of occupational stress
• Developing, implementing & evaluating actions that reduce & prevent occupational stress

Back from the Edge – the problem
Methods

• National survey to all registered nurses in very remote Australia
• Participatory Action research in very Remote Northern Territory
• Repeat national survey to all registered nurses in very remote Australia
Evaluation

Process Evaluation

• Very Positive
• RANS in particular appreciated the opportunity to debrief and to have input into changes.
• The least powerful gave the most positive feedback

Outcome Evaluation

• No decrease in job demands or increase in job resources
Outcomes

- Few interventions were implemented in the time of the project.
- Interventions have continued to be implemented since the end of the project in 2012 but slowly and haphazardly until the murder of Gayle Woodford.
- After the murder, massive increase of pressure by
  - media, RANs, public, political
  - RAN safety petition
  - Gayle’s Law
- Evidence-based solutions tragically waiting for the “problem”
Gayle Woodford
Emeritus Professor Paul Worley

Rural-based medical education
Discussion - how can rural health research influence the policy agenda?

1. Based on what we know from rural health research, what are the major policy initiatives that could be developed to advance the health of rural and remote residents?

2. Do we need a national rural health research IMPLEMENTATION strategy to inform and monitor outcomes from policies and programs?

3. If so, what process/resources would be needed?