A SYSTEMATIC REVIEW OF HEALTH SERVICE MODELS IN RURAL AND REMOTE AUSTRALIA

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The issue

“In Australia, the importance of providing appropriate, sustainable, high quality health care to all Australians … is paramount”

Productivity Commission 2005
The problem

• How best to provide primary health care services to small rural and remote communities where the population and service infrastructure is sparse and the need for health services is great.
The context

**GEOGRAPHICAL LOCATION**

<table>
<thead>
<tr>
<th>Remote/dispersed population</th>
<th>Rural/closer settled population</th>
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</table>

**Small dispersed Communities**
- Mobile, outreach services
- Integrated, multifacility
- Enhanced role for telehealth
- Multiskilled workforce
- Primary health care
- Emergency/ambulatory care

**Large Communities**
- Discrete services available
- Face-to-face contact
- Specialised workforce
- Acute care, high technology equipment

**POPULATION SIZE**
- Small dispersed communities
- Rural/closer settled population
- Large communities
Background

• Poorer health status of rural and remote population
• Substantially fewer health care resources
• A decade of ‘innovative’ models:
  – pilots, trials & demonstration projects
• National policy focus more on workforce than comprehensive primary health care
Finding solutions

• Given diversity, no ‘one-coat-fits-all’ solution

• Need for evidence-based policies and programs

• Value of systematic reviews:
  – comprehensive, objective, valid, consistent, reproducible, transparent evidence
Methodology

- All published Australian literature since first National Rural Health Policy
- Guided by APHCRI parameters
- Guided by a reference group
- ‘Black’ & ‘Grey’ literature
- 9555 initial retrievals reduced to 161 relevant publications
Focus of research questions

- key rural and remote primary health care models and policy changes, and the specific structural or financial issues addressed
- barriers to, and facilitators of, successful implementation of key reforms
- characteristics of appropriate service models for rural and remote Australia
- evidence-informed principles to guide effective and sustainable models
Results

• Few comprehensive evaluations (n=36)
• Successful health service models could be grouped within typology
• Exemplars - effective models share common success factors
• Possible to develop key evidence-informed principles to guide primary health care models in rural and remote Australia
# The typology of models

<table>
<thead>
<tr>
<th>MODEL TYPES</th>
<th>EXAMPLES</th>
<th>SENTINEL DRIVER</th>
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</thead>
<tbody>
<tr>
<td><strong>Discrete Services</strong></td>
<td>• Easy entry-gracious exit’ &lt;br&gt; • Viable models &lt;br&gt; • University clinics</td>
<td>Sustainable medical workforce</td>
</tr>
<tr>
<td><strong>Integrated Services</strong></td>
<td>• Shared care &lt;br&gt; • Co-ordinated Care Trials &lt;br&gt; • Multi-Purpose Services Program</td>
<td>Coordination between, and access to, services otherwise not available or sufficient</td>
</tr>
<tr>
<td><strong>Comprehensive PHC Services</strong></td>
<td>• Aboriginal Controlled Community Health Services</td>
<td>Primary focus on improved access to services</td>
</tr>
<tr>
<td><strong>Outreach Services</strong></td>
<td>• Hub-and-spoke &lt;br&gt; • Visiting/perIODic services &lt;br&gt; • Fly-in, fly-out</td>
<td>Access for communities too small to support discrete service</td>
</tr>
<tr>
<td><strong>Virtual Outreach Services</strong></td>
<td>• Virtual amalgamation &lt;br&gt; • Virtual clinics – video assessment &amp; monitoring &lt;br&gt; • Telehealth/telemedicine</td>
<td>Use of IT to increase access to and sustain service for communities too small to support discrete rural service</td>
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# Impact of rural & remote context on health service model option

<table>
<thead>
<tr>
<th>CONTEXT</th>
<th>HEALTH SERVICE OPTIONS</th>
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</thead>
</table>
| RURAL (Larger, more closely settled communities) | Discrete  
Option where catchment populations are sufficient and essential service requirements easily met. Environmental enablers less influential |
|                                | Integrated  
Integration to maximise economies of scale and range of locally available services important when individual services not sustainable. Single entry-point important to co-ordinate patient care and reduce the need for patients to travel extensive distances. |
|                                | Comprehensive PHC  
Suited in small, isolated communities where few alternatives. Environmental enablers important to facilitate the delivery of appropriate care, minimise cost-shifting and duplication of activity, maximise community participation and flexibility. |
| REMOTE (Small diverse communities) | Virtual Outreach  
Communities too small to support permanent local services. Co-ordination with any existing services is critical. |
The guidelines to developing successful models

<table>
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<tr>
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<th>ENVIRONMENTAL ENABLERS</th>
<th>ESSENTIAL SERVICE REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RURAL (Larger, more closely settled communities)</td>
<td>• Discrete</td>
<td>1. Supportive policy</td>
<td>1. Workforce organisation</td>
</tr>
<tr>
<td></td>
<td>• Integrated</td>
<td>2. Commonwealth State relations</td>
<td>2. Workforce supply</td>
</tr>
<tr>
<td></td>
<td>• Comprehensive PHC</td>
<td>3. Community readiness</td>
<td>3. Funding</td>
</tr>
<tr>
<td></td>
<td>• Outreach</td>
<td></td>
<td>4. Governance, management &amp; leadership</td>
</tr>
<tr>
<td></td>
<td>• Virtual Outreach</td>
<td></td>
<td>5. Linkages</td>
</tr>
<tr>
<td>REMOTE (Small dispersed populations)</td>
<td></td>
<td></td>
<td>6. Infrastructure</td>
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Where to next?

• “Knowledge support” - A key function of systematic reviews is to provide new knowledge

• “Decision support” - Equally important is how this knowledge is used to inform the development of appropriate policies and programs

• “Implementation” - Take-up’ of options is most likely when key decision-makers involved in process and when credible evidence is presented of ‘what works well where and why’!
The final report of the systematic review is available at:

http://www.anu.edu.au/aphcri/
Thank you