Making Telehealth Sustainable in South Australia

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The Promise of Telehealth

• Increase access to health care for underserved groups
• Help solve health workforce maldistribution and rural retention
• Improve health service integration and patient safety
• Improve quality of care
• Reduce the costs and inefficiencies of travel
• Deliver effective chronic disease management to the home
The Problems of Telehealth

• Slow uptake
• More pilots than Qantas
• Low numbers
• Fragmented services
• Lack of sustainability

“Failure to adopt has dominated much of our scientific consideration of telemedicine in the last 20 years” – Roald C Merrel, Editor-in-Chief, Telemedicine Journal and e-Health” 2012
## Telehealth Barriers and Enablers

<table>
<thead>
<tr>
<th>Area</th>
<th>Telehealth Enablers</th>
<th>Telehealth Barriers</th>
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<tbody>
<tr>
<td>Funding</td>
<td>Initial capital investment</td>
<td>Short term funding cycles</td>
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<td>Provider reimbursement</td>
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<td>Technology</td>
<td>Technology capability</td>
<td>Lack of IT training and support</td>
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<td>Organisational</td>
<td>Organisational structures and protocols developed</td>
<td>Ad hoc approach</td>
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<td>Integrated into routine services</td>
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<td>Collaborative relationships</td>
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<td>Future planning of services</td>
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<td>Attitudes</td>
<td>Participant acceptance</td>
<td>Lack of participation</td>
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<td>Senior executive support</td>
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<td>Governance</td>
<td>Standards and policies developed</td>
<td>Legal and regulatory barriers</td>
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<td></td>
<td></td>
<td>- lack of insurance</td>
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<td>- jurisdictional licencing</td>
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<td>Outcomes</td>
<td>Demonstrably delivers value</td>
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Theories of Telehealth Uptake and Sustainability

**Individual Theories:** *personal agency is most important*
- Rogers’ diffusion of innovation
- Knowledge barrier perspective
- Technology Acceptance Model (TAM)

**Relationship Theories:** *between individual and technology*
- Human Factors approach
- Sociotechnical model

**Process Theories:** *development over time*
- Lifecycle theories
- Disruptive innovation
- Normalisation Process Theory (NPT)

**System Theories:** *all components considered together*
- Complexity theory
- General systems theory
Specific Research Questions

• What is the key factor in initiating telehealth services?
• What is the key factor for sustainable telehealth services?
• What model explains how a telehealth service become sustainable?

Where should you focus to get the best results for your efforts with limited time and money?
The Telehealth Services Study

**METHODS:** A qualitative grounded theory study

- I interviewed 39 people about 37 different telehealth services in Australia
- I aimed to find out what were the key factors that promoted uptake and created sustainability
- Along the way I also found out about the vulnerability of telehealth services
- 80% of the services were real time video, and 70% delivered services to rural areas
Initiation of Telehealth Services

Question 1: What is the key factor in initiating telehealth services?

- Champions promoting the service
  - Good relationships between providers
  - Positive beliefs about telehealth
    - 1. Telehealth is safe
    - 2. Telehealth is effective
    - 3. Telehealth is usual care
Uptake of Telehealth Services

- Champions promoting the service
- Positive beliefs about telehealth
- Good relationships between providers
- Clinician demand for service
- Clinician acceptance
Sustainable Telehealth Operations

- Champions promoting telehealth
- Good relationships between providers
- Positive beliefs about telehealth
- Clinician demand for service
- Resourcing
- Clinical workforce availability
- Adequate technology
- Sustainable telehealth service
Effect of Technology

• Technology must be adequate
• Above this level, if clinicians want to do telehealth they will work with the technology they are given
• Clinicians had little influence on the type and quality of the technology they were using
• Internal IT support was much more important than external vendors
Clinician Acceptance and Service Development

• It’s not just about the technology !!!

• It’s **REALLY** not just about the technology !!!

• Telehealth services are new models of care

• Telehealth changes the WHO, WHERE, WHAT and HOW of health care

• Telehealth changes how patients, providers and organisations relate to each other
Telehealth in South Australia

• Public sector was an early leader in telehealth from the mid-1990’s (driven by grants)
• Rural and Remote Mental Health Services
• North-West Adelaide Telehealth Network: renal, surgical, respiratory from TQEH
• Government sector then paused until the DTN
• Home medication management RDNS from 2007
• Flinders home telehealth project
Telehealth Delivering Health Outcomes

Began 12 years ago; been statewide for 5 years
Includes a telephone hot line, ECG interpretation, Point of care testing, TNK delivery, clinical guidelines, video consulting ... they have **halved the death rate** for acute cardiac presentations in rural South Australia; it is now the same as the urban rate.
Telehealth in the private sector: uptake of Medicare item numbers
Per Capita Medicare Uptake by Jurisdiction
5 Key Summary Points

1. Telehealth services are small and fragmented
2. Champions initiate services
3. Clinician acceptance creates sustainability
4. Good relationships, positive beliefs and well functioning service models create clinician acceptance
5. Getting the service model right is more important than the technology
Prospects for Telehealth in South Australia

• Small Population of 1.67m, ideal for whole of system integration
• Some leading innovations, ready for wider scale roll out
• Need to work together to achieve a critical mass
• How about a combined three university telehealth/e-health research, education and practice unit?
Free e-Book about Telehealth Service Models

www.e-unicare.com.au
References

• Wade VA, Eliott, JA and Hiller JE. Clinician acceptance is the key factor for sustainable telehealth services. Qualitative Health Research 2014; 5: 682-694. DOI: 10.1177/1049732314528809.


• Coiera E. Why system inertia makes health reform so difficult. BMJ. 2011;342:d3693.
Thank You and Questions