Home telehealth for the non-surgical management of chronic spinal pain patients: a service evaluation

Michelle Cottrell
BPhy, MMF, PhD Candidate
Centre for Research Excellence in Telehealth
School of Health & Rehabilitation Sciences,
University of Queensland

Co-investigators: Prof Trevor Russell, Dr Shaun O’Leary, Dr Annie Hill, Mr Perry Judd, Mr Mark Cruickshank

Background:

- Leading cause of pain & disability [Vos et al., 2015]
- High economic burden [AIHW, 2014]
- Prevalence continues to escalate [Arthritis & Osteoporosis Victoria, 2013]
- Third-most common reason for GP visit [Britt et al., 2014]
- Long public sector waitlist times

RBWH Spinal Physiotherapy Screening Clinic:

- Advanced Musculoskeletal Physiotherapists screen non-urgent (Cat 2/3) spinal pain patients on specialist Neurosurgery & Orthopaedic Spinal waiting lists.
- 67% recommended non-surgical management – physiotherapy, occupational therapy, dietetics, psychology, pharmacy
- coordinated referrals to local healthcare services

The problem …

- 59% live patients reside outside of Metro North HHS
- 32% of patients unable to access local non-surgical treatment options [Cottrell et al., 2017]

Could telerehabilitation be the solution?

I2I-4-Telehealth:

Development Stage: State the purpose

Goal: SPSC patients will have improved access to recommended multidisciplinary non-surgical management via telehealth.
Development Stage: Select the innovation

Real-time telerehabilitation for the treatment of musculoskeletal conditions is effective and cost-efficient.

**Patients are willing to use telehealth for the multidisciplinary management of chronic musculoskeletal conditions**

A cross-sectional survey

**Quality of evidence for innovation**

- Benefit outweighs potential risk
- Technology infrastructure
- Business case

Checkpoint: Are we ready to implement?

- Quality of evidence for innovation
- Benefit outweighs potential risk
- Technology infrastructure
- Business case

**RBWH SPSC Telehealth Clinic**

2-day week service:
- 0.4FTE Physiotherapy
- 0.2FTE Occupational Therapy
- 0.2FTE Nutrition & Dietetics
- 0.2FTE Psychology
- 0.2FTE Pharmacy

Eligibility:
- Clinically appropriate (as determined by referring Clinical Leader)
- Access to Internet-enabled computer device

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<th>OT</th>
<th>PSYCH</th>
<th>DIET</th>
<th>PHARM</th>
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<tr>
<td>TOTAL Ref 222 (%)</td>
<td>104 (46%)</td>
<td>32 (14%)</td>
<td>64 (29%)</td>
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<tr>
<td>NEW Attended</td>
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<td>25</td>
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<td>REVIEW Attended</td>
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<td>103</td>
<td>40</td>
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<td>FTA (%)</td>
<td>29 (13%)</td>
<td>24 (24%)</td>
<td>23 (22%)</td>
<td>16 (7%)</td>
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Knowledge translation (KT) activities:

- Targeted towards potential referrers
- Designed to facilitate implementation
  - Formal vs. informal
- Clinical & management ‘champions’
- Early-adopters ↑ dissemination

Evaluation of SPSC Telehealth Clinic:

1. Comparative Effectiveness Trial – Telehealth vs. Local F2F
   - Primary Outcome = health service metrics (eg. time to first appit.)
   - Secondary Outcomes = clinical, economic
   - Current stage = data collection

2. Mixed-methods, repeated measure clinician evaluation
   - Primary outcome = change in knowledge, acceptance & satisfaction using Telehealth over time.
   - Current stage = data analysis
Discussion points:

- RBWH SPSC & MDS Telehealth Clinic:
  - Multidisciplinary allied health treatment of chronic spinal conditions
  - Home telehealth, using patient's own technology

- I2I-4-Telehealth framework:
  - Guides development, implementation & evaluation
  - Helps identify barriers & enablers to implementation along the way.

- Project funding ceases EOFY17-18 → sustainability post-project phase TBC

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  - Dr Shaun O'Leary
  - Dr Anne Hill
  - A/Prof Tracy Comans

References:


