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# Inquiry into Telehealth Services in Queensland

Tunstall Healthcare Submission



**Tunstall**

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## 1. Introduction

This submission is in reference to the Queensland Parliament Health and Community Services Committee Inquiry into Telehealth Services in Queensland.

The information and evidence presented in this submission relate to all four terms of reference.

The aim of this submission is to provide information and share experience of telehealth programs currently being deployed in Queensland.

## 2. Background

Tunstall Healthcare is the world's leading provider of telehealthcare solutions, operating in over 50 countries and supporting more than 3.6 million people worldwide. Our telehealth systems provide patients with the means to easily monitor their vital signs and symptoms at home, supporting the delivery of effective healthcare in the community.

Tunstall has played a significant part in the complex Australian health system since 2002, contributing to the health and wellbeing of over 70,000 people and their carers. Tunstall is a leading provider of telecare and telehealth services including telehealth remote monitoring and 24/7 emergency response services.

Tunstall has been delivering pioneering telehealthcare solutions for more than 55 years, and remains at the forefront of transforming health and care services. Our extensive worldwide experience has helped us define the essential ingredients for a successful telehealth service:

- Integration—the key to efficiency.
- Stakeholder engagement—crucial from the very start.
- Large-scale, mainstream implementation—maximises the benefits.

## 3. Evidence

Tunstall Healthcare is currently involved in 12 telehealth programs across Australia, six of which monitor clients in Queensland. These programs are outcomes based, which focus on quality of life for the patient, managing the workforce, reducing hospitalisations and controlling costs. The range is not limited to but includes vital sign management, health coaching, medication compliance, remote care and support for patients with home dialysis, disease management such as cystic fibrosis patients and those with diabetes, and patients in rural areas with cardiac disease.

Telehealth programs with Tunstall involvement:

- [Townsville-Mackay Medicare Local Diabetes In-Home Management Trial](#): Currently 115 Queensland clients.
- [DVA CVC In-home Telemonitoring Trial](#): 300 clients nationally, currently 30 Queensland based.
- [Integrated Living and New England Medicare Local Staying Strong Program](#): 120 clients nationally, currently 40 Queensland based.
- Centacare Brisbane: Currently 5 Queensland clients.

- Integrated Living HACC Telehealth Nursing Project: Potential for 400 patients nationally. Commenced May 1, 2014.
- Ipswich Hospital West Moreton Hospital and Health Service: Due to commence June 2014.
- [Western Health HUG Project](#): 20 Victoria based clients.
- [Feros Care Australian Pilot Program: Supporting people to live safely and independently at home](#): 18 clients.
- [Whole System Demonstrator](#): 6000 UK based clients.

Available results from a number of the programs are outlined below.

### 3.1 Townsville-Mackay Medicare Local Diabetes In-Home Management Trial

The Townsville- Mackay Medicare Local (TMML) randomised trial aims to test a model of care for people with type 2 diabetes which includes:

- in-home monitoring through high speed broadband
- video conferencing with health professionals from home
- access to the trial's Diabetes Care Co-ordinator (a diabetes Nurse Educator) to complement normal general practitioner (GP) care.

This will be compared to usual diabetes care.

The trial aims to provide robust evidence based to extend this model into other health conditions and into regional areas.

The primary outcome evaluated will be the effect on HbA1c. Other biomedical endpoints, patient and GP satisfaction and the cost effectiveness of the care model will also be assessed.

<sup>1</sup>In a presentation released by TMML, results of two patients were released, showing reductions in blood glucose levels.

Patient K is a 64 year old male, who is a former smoker, moderate drinker and has a poor diet. After four months on the trial, Patient K's HbA1c results had decreased from 8.5% to 6.3%.

Patient J is a 73 year old male, who is a former smoker and occasional drinker. After five months on the trial, Patient J's HbA1c results had decreased from 8.6% to 6.8%.

This trial will cease at the end of 2014 after which results will be available.

### 3.2 Integrated Living and New England Medicare Local Staying Strong Program

<sup>2</sup>The Staying Strong program is focussed on persons identifying as Aboriginal and/or Torres Strait Islander, aged 50 years or over, and addresses Chronic Disease Management supported by telehealth and online intergenerational engagement.

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1 Dr Carlisle, K. Townsville NBN diabetes in-home monitoring trial. Available at [http://www.checkup.org.au/icms\\_docs/160971\\_Dr\\_Karen\\_Carlisle\\_-\\_Townsville\\_NBN\\_diabetes\\_in-home\\_monitoring\\_trial.pdf](http://www.checkup.org.au/icms_docs/160971_Dr_Karen_Carlisle_-_Townsville_NBN_diabetes_in-home_monitoring_trial.pdf)  
2 Arunachalam, I 2014. Staying strong telehealth: Better health outcomes for older indigenous Australians. Available at <http://integratedliving.org.au/article/staying-strong-telehealth-2233.html>

Telehealth monitoring can be performed either in the home or via community telehealth hubs in the communities.

Potential benefits of the program:

- reduce emergency hospitalisations
- more accurate and timely diagnosis
- increase awareness of own health conditions
- increase independence and self-management
- reduce need for GP home visits
- peace of mind for older person and family.

Project successes:

- expansion of integrated living presence and partnership development at trial sites
- organisational experience in the delivery of telehealth services
- probably aversion of heart attack/reduction in hospitalisation
- supplementary nursing support.

The final evaluation report is due for completion by June 2014. The report will evaluate the enablers and barriers to using telehealth, as well as the health outcomes and if quality of life was improved.

### 3.3 Western Health HUG Project

The Home Therapies utilising Tele-Health Guidance and Monitoring Project (HUG Project) is an initiative of the Renal Services Department utilising the latest in telehealth technology to give new patients the confidence to choose a home modality and to closely monitor and support patient on home dialysis. Working as part of the Home Therapies team, this world-first project aims to deliver an improved standard of care to home dialysis patients.

The trial is using a customised version of Tunstall's myclinic and ICP triagemanager, used to support patients who conduct their own dialysis and monitoring of their health from their own home. Everything supplied by Tunstall has been customised for this program—health interviews, data records, and even translations for languages other than English.

Potential benefits of the project:

- Overcome 85% of the reason while people fail a home therapy in Australia: social reasons, technical failure and infective complications.
- Increase uptake into a home therapy.
- Improve persistence with the therapy, enabling people to dialyse at home longer.

Project successes:

- Almost 50% reduction in patients presenting to hospital.

- Take-up rate of in-home dialysis has increased from 16% to the targeted 33%.

The Home Therapies team aim to complete their analysis by July 2014.

### 3.4 Feros Care Australian Pilot Program: Supporting people to live safely and independently at home

<sup>3</sup>Specific telehealth aims included the following:

- Defer residential aged care admission
- Prevent unplanned hospital admissions
- Reduce routine GP visits and allow better utilisation of medical services
- Allow improved self-management of chronic conditions and minimise consequential damage
- Allow better care management by Feros Care staff and Care Managers
- Reduce Client anxiety
- Reduce Carer anxiety.

Pilot Program Clients were selected from existing Feros Care Clients, already receiving care at home. Feros Care Clients are broadly characterised as:

- Very elderly
- Often living on their own
- Often having poor mobility and at risk of falling
- Often having multiple chronic conditions.

Even though most Clients in this pilot group have complex chronic and degenerative conditions which often give considerable pain and discomfort, of those who were able to respond to the survey:

- 69% were less concerned about the daily severity of their conditions;
- 44% felt that they needed to visit their GP less frequently; and
- 44% felt that their quality of life had improved relative to the beginning of the Pilot Program.

### 3.5 Whole System Demonstrator

Tunstall's telehealth solutions were at the heart of the UK Department of Health's Whole Systems Demonstrator (WSD) programme, which evaluated the use of telecare and telehealth in supporting people with long-term health and care needs to live independently.

The project was rolled out to 6,000 patients throughout Kent, Newham and Cornwall, making it the largest randomised control study of its kind in the world.

Clinical benefits:

- Encourages self-management

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<sup>3</sup> Feros Care 2010. Telehealthcare—Supporting people to live safely and independently at home: An Australian Pilot Program. Available at <http://www.abc.net.au/technology/images/general/features/nbn/health/Telehealthcare-report-Feros.pdf>

- Enables early identification of exacerbations
- Aids medication compliance
- Identifies trends over time to aid proactive care planning
- Helps clinicians make more informed medication management decisions
- Supports efficient caseload management

<sup>4</sup>Results show the following commissioning benefits:

- 45% reduction in mortality rates
- 20% reduction in emergency admissions
- 15% reduction in A&E visits
- 14% reduction in elective admissions
- 14% reduction in bed days
- 8% reduction in tariff costs

#### 4. Value for money

At approximately \$200 per month for equipment, connectivity, hosting and monitoring, in-home telehealth monitoring costs \$2,400 per annum. At a cost of approximately <sup>5</sup>\$5,000 per hospitalisation, telehealth monitoring will pay for itself with the prevention of just one hospital stay.

<sup>6</sup>In May 2012, the Medical Technology Association of Australia (MTAA) released a telehealth strategy for Australia, outlining a framework for the support of patients in the community through remote patient monitoring. The strategy also provided estimates on the potential cost savings through a telehealth home care platform. The areas reviewed included:

- residential care
- community care packages
- emergency room admissions
- potentially preventable hospitalizations
- Royal Flying Doctors Services in rural areas
- chronic disease management
- patient transport, travel and unnecessary tests.

In total, the MTAA estimates annual cost savings at more than \$3.4 billion.

#### 5. Identified barriers to successful implementation

Through telehealth trials and programs, the identified barriers to successful implementation include:

- recruitment and retention of telehealth nursing staff

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<sup>4</sup> British Medical Journal 2012. Effect of telehealth on use of secondary care and mortality: findings from the Whole System Demonstrator cluster randomised trial.

<sup>5</sup> Australian Institute of Health and Wellbeing. Hospital performance: cost per casemix-adjusted separation. Available at <http://www.aihw.gov.au/haag10-11/hospital-performance-cost/>

<sup>6</sup> Medical Technology Association of Australia 2012. A telehealth strategy for Australia: supporting patients in the community. Available from: <http://www.mtaa.org.au/docs/position-papers/supporting-a-telehealth-strategy-for-australia-release-version-may-2012.pdf>

- lack of GP remuneration
- restrictions within current incentives
- lack of stakeholder engagement
- lack of awareness
- participant recruitment
- connectivity reliability—phone line, GSM, IP, NBN, satellite.

## 5.1 Strategies to address barriers

The barriers to telehealth are complex and successful implementation on a large scale takes collaboration, persistence and a willingness to change from many sectors. There is more work to be done around incentivising GPs, ensuring community engagement, economic modeling and public awareness, to enable scalability.

Strategies to address lack of stakeholder engagement include:

- early consultation
- investment of time
- responsive communications
- partnership agreements
- working groups and involvement in project activities
- incentives and education
- telehealth care plans
- tailored education and training
- more flexible and integrated funding.

Strategies to address issues with participant recruitment include:

- public education and awareness
- culturally appropriate communications collateral
- recruitment assessment criteria.

## 6. Summary

Tunstall presents this information as a source of reference for the Committee. If further information should be required or any enquiries result from this submission please do not hesitate to contact Lisa Capamagian:

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