

6 August 2012

Sue Cawcutt
Research Director
Health and Community Services Committee
Queensland Parliamentary Services
Parliament House
George Street
BRISBANE QLD 4000

Dear Ms Cawcutt

Re: Palliative Care Services and Home and Community Care Services Inquiry

Thank you for the opportunity to meet with the Health and Community Services Committee members to share LifeTec's views on the committee's terms of reference.

I am also pleased to provide the inquiry with the attached written submission in response to the inquiry's terms of reference.

I would be pleased to continue discussions with the committee on the present and future provision of home and community care services in Queensland.

Yours sincerely,



James Barrientos
Chief Executive Officer
LifeTec

Palliative Care Services and Home and Community Care Services Inquiry

The purpose of this submission is to provide my views on issues raised by the Health and Community Services Committee's inquiry. These views are in response to the committee's terms of reference.

The views and recommendations made in this submission are based on my personal experience gained over years of experience in the health sector. This includes roles such as CEO of LifeTec, a provider of specialist assistive technology* services, as well as my background as a health professional in the public and private sector in Queensland.

My views and recommendations focus on present and future home and community care service delivery models.

I have also included peer reviewed research papers to support my views on innovative service delivery models.

* Assistive technology is any product, device or system that provides people with practical solutions to everyday life activities.

Capacity and Future Needs of Home and Community Care Services

Most home and community care services in Queensland will continue to become unsustainable under the current models. This is primarily driven by the demographic evolution we are experiencing universally, including in Australia. The effects of our ageing population are well documented and will not be entered into in this submission.

I believe two areas that have enormous potential to improve the effectiveness and efficiency of home and community care services are innovation and social engagement.

Innovation

Telehealthcare and ambient living are two examples of innovative service delivery models which have been highly successful for our clients and organisation.

Telehealthcare

Telehealthcare is a comprehensive care model to support a person's health and community care needs in their own environment. It can involve remote monitoring of emergencies and social needs, measuring a person's vital signs such as heart rate, blood pressure and weight, as well providing remote specialist services by electronic means.

LifeTec provides its specialist services on an in-centre and outreach basis. Our statewide outreach services have been primarily provided on a face to face basis with our health professionals travelling to different parts of the state. This method of delivery has many limitations including lack of service continuity and accessibility as well as economic disadvantages.

These limitations have led to LifeTec introducing telehealthcare services to some of our remote clients over the last two years. In particular, we have introduced specialist teleconsultations using tablets such as iPads to provide LifeTec services between remote clients and allied health professionals based in one of our centres. This has resulted in significant improvements in service delivery effectiveness and efficiencies, especially in cutting waiting times and reducing costs.

Two examples of LifeTec's specialist teleconsultations include:

LifeTec led a pilot project with the Department of Communities Housing and Homelessness to undertake assessments for major home modifications in regional Queensland. This project utilised innovative teleconsultations to provide occupational therapy recommendations for home modifications for remote clients.

LifeTec occupational therapists made recommendations for major modifications based on live client consultations on iPads, including video footage, photographs and a report from a local coordinator present at the client's home. The recommendations were then implemented by builders and reviewed by LifeTec upon completion.

This innovative approach dramatically reduced waiting times for the entire home modification process including assessment, recommendations and implementation of modifications. Some results for major home modifications work include:

- Time taken from initial referral to occupational therapist recommendation report reduced from 150 to 5 days
- Time taken from occupational therapist recommendation report to commencement of work reduced from 324 to 14 days

A second example of LifeTec's successful teleconsultations services includes when LifeTec was contracted in 2010/2011 by the Department of Communities Housing and Homelessness to reduce a backlog of clients awaiting assessment for major and minor home modifications across the state of Queensland.

By using teleconsultations we were able to achieve the following results:

- LifeTec completed 135 private home modification assessments for clients across the state in South East Queensland and regional and remote areas using teleconsultations.
- LifeTec significantly reduced average waiting times from initial referral to completed home modifications for this group of clients from 58 weeks to 4 weeks.

LifeTec is currently investigating different telehealthcare models to deliver its services on a greater scale. We are also collaborating with researchers to develop research projects that will measure the impact of telehealthcare in different contexts including functional, social and economic contexts.

There are several international research projects which provide significant evidence on the benefits of telehealthcare. A study of the effects of telehealthcare on mortality and the use of secondary care, published in the British Medical Journal (BMJ)*, highlights telehealthcare's effectiveness in improving outcomes and avoiding the need for hospital care for patients with long-term conditions.

The study, one of the largest ever conducted on telehealth, was led by researchers at the Nuffield Trust, and assessed the impact of telehealthcare on hospital use for 3,230 patients with long term conditions (diabetes, chronic obstructive pulmonary disease, or heart failure) over one year.

Patients were randomly split into two groups, with 1,570 patients given telehealthcare solutions and taught how to monitor their condition at home, transmitting data to health care professionals; while 1,584 control patients received traditional care. The results showed that, compared with the control group, telehealthcare delivered:

- A 45% reduction in mortality rate
- A 20% reduction in emergency admissions
- 15% fewer accident and emergency visits
- 14% reduction in bed days
- 8% reduction in tariff costs

A detailed report on this study can be found at:

[* BMJ: Effect of telehealth on use of secondary care and mortality: findings from the Whole System Demonstrator cluster randomised trial](#)

Ambient Living

LifeTec has also adopted an ambient living model to promote different applications and benefits of assistive technology. Ambient living refers to incorporating assistive technology into everyday environments. LifeTec has developed a Smart Home demonstrator in its Brisbane centre which is used to demonstrate different assistive technology applications to our clients. The demonstrator includes living, kitchen, bathroom and bedroom areas with functional technologies in each area.

High and low level technologies are incorporated throughout the LifeTec Smart Home Demonstrator. These include a universally designed floor plan including reaching spaces and turning circles for a person in a wheelchair, ergonomically designed furniture, non slip flooring, visual cues for people with dementia or vision impairment, integrated personal alarm system with different peripherals for motion, verbal and telehealth applications. The bedroom area features a simple telehealth system designed to demonstrate how easy it is to monitor your own health from the comfort of your own home.

We have found that the ambient living concept assists people to identify a range of needs and wants to assist them achieve their goals in different contexts. The Smart Home Demonstrator is an effective method of demonstrating the benefits of ambient living.

LifeTec is currently in the process of constructing a Smart Home Demonstrator in its Townsville centre. We have also had interest from national and international health organisations wishing to implement ambient living models in their centres.

Social Engagement

Current adoption rates of assistive technology by people in Australia remains low. It is my belief that further adoption of assistive technology solutions needs to be socially driven. Greater social acceptance of assistive technologies can be achieved by:

- Increasing awareness and knowledge of assistive technology and its benefits
- Promotion and use of mainstream technologies
- Reducing complexities of assistive technology applications
- Reducing social stigmas about assistive technology and its use

LifeTec's mission is to assist people to choose the most appropriate assistive technology to enable them to live independently and improve their quality of life. Our recommendations include mainstream devices to help people achieve their needs and goals. In fact, we have found that mainstream devices are often more socially acceptable, which can lead to their improved adoption.

One example is the success we have experienced with the uptake of mainstream communication technologies by people who have difficulty with their speech. As part of LifeTec's specialist services, our health professionals have used communication Apps on iPads for people with speech conditions. This has resulted in a significant increase in the uptake of communication services and by LifeTec clients. In particular, it has resulted in increased use of iPads and relevant communication Apps. Not only are these devices socially acceptable (particularly for younger clients), they are also more affordable.

Another way to ensure assistive technology is socially accepted is by reducing the complexities, or the perceived complexities, of these technologies. One example is to deliver telehealthcare services to the general public by using existing devices that people are familiar and comfortable with, such as their television sets. People are more likely to adopt home telehealthcare if it is incorporated into their familiar home environments, such as a television.

Opportunities for Reform to Improve Collaboration and Cooperation between Chronic, Disability and other Health Services

It has been my experience that taking a holistic approach to assessing peoples' health needs and wants results in more effective uptake of assistive technology solutions. I believe the adoption of a holistic model in addressing peoples' home and community health needs, offers great potential for better cooperation between different health sectors including chronic, disability and health services.

LifeTec uses a holistic model to assist people in achieving their needs and wants through assistive technology solutions. This means our health professionals take into consideration different contextual factors when making recommendations to our clients. A holistic approach assesses the client's general contextual factors such as environment setting, social context, and cultural context, as well as human factors such as age and gender, client's goals, medical profile, current and future abilities and goals, and individual preferences and attitudes.

A holistic approach also evaluates the client's activity factors such as self care and daily activities, and their educational, vocational and recreational activities. Finally a holistic model also takes into account different assistive technology factors to improve client outcomes. These include items such as useability, size and weight, aesthetics, cost, transportability, specifications and maintenance.

I believe another important factor in a holistic model is to employ an inter-disciplinary model, rather than the traditional multi-disciplinary one. An inter-disciplinary team is one that uses different health care professional disciplines to work in a coordinated fashion towards a common goal for a client. A multi-disciplinary team is one that consists of different health care professional disciplines which are not considered to overlap when working towards a common goal for the client.

LifeTec has employed an inter-disciplinary holistic model for many years to deliver its specialist services. We have plenty of anecdotal evidence of the successes resulting from this approach by seeing first-hand the good outcomes we are having everyday with our clients. However, we are also currently in the process of developing a research framework to measure the impact of our services more scientifically so we can produce evidence based outcomes.

I think there is great potential to improve collaboration and cooperation between chronic, disability and other health services by implementing inter-disciplinary holistic models of service delivery. There is opportunity to not only engage different health disciplines in such a coordinated approach, but also to better engage different services such as chronic, disability and health services. I believe this coordinated approach would improve the continuity of care for clients.

One example of this continuity of care is to better engage chronic and disability services in hospital discharge programs. This could significantly improve client outcomes after they have been discharged from hospital due to greater consistency of communication, action plans and monitoring of clients' progress by the different stages of care.

LifeTec has been part of such a patient discharge program through the spinal unit at the Princess Alexandra hospital for the past six years. Under this successful program, LifeTec provides specialist consultation services on assistive technology solutions as part of the discharge program to enable patients to remain living independently and safely in their own homes. This process has resulted in LifeTec and hospital health professionals working in a coordinated manner toward the patient's goals.



James Barrientos
Chief Executive Officer
LifeTec

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