Submission by the Australasian Telehealth Society

Submission to Health and Community Services Committee Queensland Government Inquiry into Telehealth Services in Queensland

To:
Research Director
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From:
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To the Research Director, Health and Community Services Committee

Re: Inquiry into Telehealth Services in Queensland

Dear Sir / Madam,

Please find attached a submission to the Queensland Parliamentary Inquiry into Telehealth Services in Queensland.

Without a doubt, telehealth has tremendous potential to reduce barriers associated with access to healthcare services, especially for people living in remote locations. Telehealth uptake continues to be a slow and fragmented process. We hope that the findings and recommendations of this Inquiry help steer current and future investments into telehealth appropriately, to ensure that opportunities are fully realised rather than just speculated.

On behalf of the Australasian Telehealth Society, we thank you for taking the time to consider this submission.

About the Australasian Telehealth Society (ATHS)

The ATHS has been formed purposely to educate, support and simplify access to useful resources and information for the planning and delivery of telehealth services. Our society has a membership representing all states and territories in Australia and cities throughout New Zealand. The ATHS was formed in 2008, with a vision to deliver a united 'voice' for telehealth advancement and covering a broad range of domains including the health sector, academic institutions, government and industry partners. While the society is still relatively young, we have already established an impressive track record by drafting various telehealth strategy documents, hosting the inaugural Global Telehealth conference in Perth during 2010 and co-hosting the Successes and Failures in Telehealth Conferences in Brisbane, during 2011 and 2013.

ATHS membership benefits are specifically designed to bring together people and to disseminate information which will ultimately help with the establishment and diffusion of telehealth within our society. With the support of the Australian Government, which has introduced a range of funding opportunities through the Medical Benefits Scheme, **it is important that we develop new models of care which include (where appropriate) telehealth, as a mode of service delivery**.

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While telehealth activity is generally increasing over time, there remain many barriers to the uptake of telehealth.

The ATHS wishes to describe an important distinction between a video communications network (sometimes referred to as a telehealth network, videoconference network) and a clinical telehealth service. This distinction is important because it is a common myth that implementing telehealth is about installing a technical network. Telehealth projects that are driven purely by technical goals often fail to produce the level of activity or benefits to the health care system that were initially proposed. In a nutshell, having a video communications network does not mean that one automatically has a functioning telehealth service. Each of these two components will be considered in turn.

1.   Video Communications Network

Most State and Territory Departments of Health have a video communications network, which is a technical infrastructure comprising dedicated video conferencing equipment on a corporate network. This may include desktop videophones, software applications, videoconferencing systems to telepresence suites in rooms that are specifically fitted out. As the individual items and rooms are costly, most health organisations, or units within larger organisations, have only one or two of these; hence those wishing to use the service must physically attend an end-point (videoconference system) within the network. The exception being at the Princess Alexandra Hospital and the Royal Children's Hospital's in Brisbane – which both have dedicated telehealth centres (operated by the UQ, Centre for Online Health) which are purposely configured for telehealth consultations and are supported by telehealth coordinators and staff with expertise in telehealth.

The videoconference network operated by the Queensland health department is multi-purpose and used for educational and administrative meetings (predominantly) as well as clinical consultations. We would argue that this is essential infrastructure for the department to maintain and modestly expand; but to simply increase the number of 'end-points', is not the answer to leveraging the benefits of telehealth for the whole health care system.

The reason for this is that this type of video communications network is inherently limited and lacking in flexibility. For example, the end-points are frequently placed in hospital board rooms or seminar rooms which are not suitable for clinical consultations. Furthermore, the limited number of end-points means that priority is given to uses for larger groups booked in advance, and that ad hoc clinical uses often cannot be accommodated. When there is an end-point for clinical use, it cannot be used simultaneously in all the places where clinical video communication is desirable, such as the Emergency Department, Outpatients Clinics, and Wards. Putting these

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larger units on trolleys, or spending additional money to give them some self-moving robotic features, still does not solve the problem of needing to scale video communication up.

So, from the point of view of what should be done about video communications, we recommend that the Queensland health department does not simply enlarge its current model. Rather, ways of incorporating video communication into everyday IT systems and structures should be sought. This involves selecting appropriate software, plus managing the existing IT network to prioritise video traffic over store-and-forward traffic such as email and web browsing. Of paramount importance, is ensuring that the communication method is proven to be clinically appropriate, acceptable from the point of view of the clinicians and patients, secure and reliable.

Furthermore, means for allowing external organisations and individuals to participate in video communication should also be a high priority. Factors such as interoperability need to be carefully considered and managed appropriately.

2. Clinical Telehealth Services

The definition of telehealth is: "The delivery of clinical services at a distance using information and communications technology" – hence telehealth is far broader than video consultations. Telehealth includes sending still images and video clips for later use, and also includes the use of patient data, as for example in home telemonitoring. Also telehealth can be delivered through many different platforms in addition to the stand-alone network discussed above, such as via mobile phones, web portals and tablet devices.

Telehealth is also not "one size fits all" in regards to how services are delivered, as each clinical discipline, or multidisciplinary area of service has unique requirements for telehealth. For example, in renal medicine there is benefit in using video communication between renal specialists and satellite dialysis centres. In cardiology, there is benefit in home monitoring for patients with heart failure. In rehabilitation, there is benefit in specialised allied health services supporting both rural rehabilitation teams and patients that have recently been discharged. In dermatology, much clinical work can be done by sending photographs of skin lesions. For more detailed discussion of these issues, see the e-book "How to Make Telehealth Work", available from http://www.e-unicare.com.au/wp-content/uploads/2013/06/unicare_ebook.pdf.

It is clear, therefore, that introducing telehealth is about service development.

Telehealth is not a straight substitution for in-person services; rather it is an additional tool in the range of options that health care providers can use to deliver care more efficiently and effectively. Telehealth works best when integrated into existing clinical processes and workflow, rather than being regarded as a stand-alone system. For example, most (9 out of 10) pre-operative consultations with an anaesthetist can be

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conducted by video consultations, which saves time for rural patients and also reduces both early admissions and cancelled operations, but for this to work, the local services need to be involved, and a plan developed for the 1 out of 10 patients that do need an in-person consultation.

If telehealth development is treated as an IT project, the end result is the "dust cover effect", whereby unused videoconferencing machines are found in cupboards, or not found at all. The problem is that it is often easier to find a one-off budget allocation for new equipment, than it is to do the longer, harder work of sitting down with patients, clinicians and managers to develop the new models of care. However, as health services delivery is so complex, system inertia makes this difficult (1). Telehealth development is more effective when clinicians and IT staff work closely together with the same aims in mind (2).

Furthermore, this inquiry should consider the role of home telehealth in the future of telehealth in Queensland. There are numerous examples where home telehealth has been found to reduce mortality, hospital admissions, and emergency department attendances (3, 4).

It is important that clinical telehealth services deliver both efficiencies and cost-effective care, and in general the economic performance of telehealth has been mixed. It depends on the specific circumstances in which telehealth is implemented as to whether or not it delivers financial benefits (5). For example, in rural regions, telehealth saves money for patients (6, 7), and also saves money on transport for health care services, both for outreach and home visiting services, and where patient travel is subsidised, as with Patient Assisted Transport Schemes. Telehealth is one of the few areas in which greater efficiencies in clinical time can be obtained through reducing the amount of time clinicians spend in travelling. Note, however, that telehealth does not eliminate all travel; rather, the typical model is to substitute a proportion of in-person outreach visits with telehealth. Some have suggested that a single national "bank" of specialists can service the whole of Australia, but this simplistic view does not take into account that it is very important for clinicians participating in telehealth to be engaged with the usual referral pathways for patients.

In addition to financial benefits, the issue of equitable access to services is very important. Telehealth allows the government to better discharge its duty to provide services to all members of the community regardless of where they live. Recent evidence also shows that telehealth can reduce disparities in health outcomes between urban and rural areas, as for example this work in South Australia, whereby a multi-modal telehealth service for acute cardiac services has reduced the death rate from acute coronary syndrome ("heart attack") in rural patients to now being the same as urban patients (8). In Queensland, a telehealth program developed in close partnership with an Indigenous community, has demonstrated significant improvements in routine screening procedures for school-age children at high risk of

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ear disease and hearing loss; reduced wait times to see a specialist; and reduced the need for travel to the city to receive specialist care (9, 10).

The trend towards online health is running strongly at present. Patients are now very familiar with seeking information on health from websites, and the upcoming stage in this transformation is going to be patients interacting with the health care system online. This is not just about convenience, but also about increasing patient autonomy and responsibility for self-care and chronic disease management, either from the patient directly or through involvement of a family member or carer. Not all of this will be telehealth, so for example administrative processes such as electronic bookings, and the development of shareable electronic records are proceeding in parallel with telehealth, but the growth of online interaction for the provision of direct services and care, which is telehealth, will be the next major step. Government telehealth services need to be ready for this and look to the future in considering where to place telehealth in its suite of services to the public.

Summary

It is important to recognise the difference between a videoconference network and a clinical telehealth service. A funded health department strategy designed to increase telehealth usage and to promote integration into the health service, needs to focus on clinical service development, and to a much lesser extent, the videoconferencing infrastructure.

For telehealth to be successfully integrated into the health service, major reform needs to take place. Existing administrative systems - which were designed for face-to-face consultations between patients and clinicians, need to be re-configured, to support consultations delivered at a distance.

In a country such as Australia, where the distances are large and specialist services are centralised, telehealth is essential. It is important that we carefully develop strategies which have demonstrable benefits for people living in remote locations.

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