



**Inquiry into Telehealth
Services in Queensland**
Health and Community Services Committee

Telstra submission

5 May 2014

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5 May 2014

The Research Director
Health and Community Services Committee
Parliament House
George Street
Brisbane Queensland 4000

To the Research Director

Telstra welcomes the opportunity to provide a submission to the Queensland Parliament's Inquiry into Telehealth Services in Queensland. Telstra's purpose is "to create a brilliant connected future for everyone". This vision means that we are strongly supportive of Telehealth, which we believe enables greater access to Australians who encounter barriers in accessing traditional face to face healthcare.

As Australia's largest telecommunications provider, Telstra believe that furthering telehealth across Australia is one of our key roles and responsibilities. Already Telstra has begun to build on our existing telehealth capability in partnering with the Northern Territory Government (NTG) to build a secure, quality of service telehealth platform connecting both public and non-government providers to ensure integrated patient care, particularly in indigenous communities. Telstra believe that this current approach with NTG represents a small but important baseline in developing National Telehealth Services which can be accessed by all providers and consumers to provide consumer focused services.

Importantly, with this National telehealth approach, the human, technical and financial resources required to implement and maintain such an approach is extensive. Noteworthy in this submission, Telstra propose the development of a public/private partnership in the provision of telehealth services in Queensland. This partnership would leverage already existing Telstra networks, infrastructure and customer bases to allow the significant scaling of Telehealth services in the most timely and resource efficient way. These services would be supported by Telstra as a provider intent on providing cutting edge technology to ensure the service quality required to ensure confident telehealth uptake and sustainability.

We look forward to the outcomes of your review and the future role Telstra might play in the expansion of telehealth in Queensland. Should the Research Director require further information in regards to Telstra's submission, please contact Dr David Doolan, Chief Health Information Officer on [REDACTED] or [REDACTED]

Regards

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1. Telstra's interest in this review and recommendations

Telstra welcomes the opportunity to provide a submission to the Queensland Parliament's Inquiry into Telehealth Services in Queensland. Telstra's purpose is "to create a brilliant connected future for everyone". This vision means that we are strongly supportive of Telehealth, which we believe enables greater access to Australians who encounter barriers in accessing traditional face to face healthcare.

Telstra has recently established a new Health business with the aim of transforming healthcare in Australia by creating an eHealth ecosystem capable of tackling some of the systems biggest challenges, including providing access to specialist healthcare, regardless of location. A key model of service required to deliver this is the use of telehealth – being able to connect practitioners with patients and other practitioners seamlessly by video – as an integrated component of care.

Already, Queensland is leveraging the multitude of benefits that worldwide evidence has confirmed on telehealth. Whilst not across the board, there are existing examples of telehealth practice that have shown that this model of service delivery can lead to significant improvements in patient outcomes and convenience whilst also delivering savings in the cost of providing care. Providing telehealth to access these benefits align directly to the four health service directions outlined in Queensland's Health Funding Priorities and Guidelines:

- Consumer-focused health services
- Providing the right services across the health continuum
- Partnerships to promote health and enhance service delivery
- Closing the gap in health outcomes for Aboriginal and Torres Strait Islander Queenslanders

Looking across the evidence base for telehealth, successfully implemented models have a number of attributes:

- **Evidence-based protocols and guidelines** that set out clearly what services can or cannot be provided via telehealth, and step out how patients should appropriately be advised and/or treated.
- **Training** of health staff in how to provide telehealth services and ongoing education and training to maintain skills and qualifications.
- **Accreditation** of health staff and the telehealth service itself to ensure it meets appropriate quality and safety standards.
- **Ongoing quality assurance and control** through senior clinical supervision who monitor the quality of service, patient experience and outcomes of care.
- **Integration** with other health providers involved in a patient's care, such as sharing records (with appropriate consent) to reduce duplication and ensure continuity of care.
- **An end-to-end service model** providing continuity and integration with other health care.
- **High engagement and acceptable** by patients and health providers that services are appropriate, high quality and are championed by clinicians. Governments act as supporters, with a strong mandate, funding and payment model.
- **In built evaluation** of benefits (access, savings and quality).
- **Enabling technologies that work**, providing patient satisfaction, information sharing, high resolution video, ease of use for practitioner so that no time is wasted and seamless integration between the service model and the enabling technology and a
- **Sustainable cost** to government, practitioners and consumers

As Australia's largest telecommunications provider, Telstra believe that furthering telehealth across Australia is a key role and responsibility. Already Telstra has begun to build on our existing telehealth capability in partnering with the Northern Territory Government to build a secure, quality of service telehealth platform connecting both public and non-government providers to ensure integrated patient care, particularly in indigenous communities. As well, Queensland can leverage its current telehealth capability and volumes into new opportunities to further the benefits that telehealth can offer to the population.

2. Opportunities to enhance telehealth

With the largest managed telehealth network in Australia, Queensland is already well recognised as one of the leaders in the development of telehealth as a service delivery model. Acknowledging this, Queensland Government has accurately identified that there remain avenues of telehealth opportunities to explore with the aim of improving quality, safety, access and efficiency in the healthcare system.

Telstra consider the following key areas worthy of consideration by the Queensland Parliamentary Inquiry into Telehealth:

- **Development of a clear understanding of the addressable patient cohort** – through data analysis and the setting of targets based on the identified patient cohort to ensure resources are allocated in areas where most benefit can be gain and to truly drive the implementation of sustainable service models
- **Identification of the true count, costs and benefits of telehealth to inform funding models** – to inform what constitutes ‘value for money’ and input to funding models that will incentivise telehealth to achieve target service volumes
- **Partnerships with many providers for further growth and access** – partnerships will be necessary to achieve growth in telehealth service volumes and the development of a provider agnostic connection service will be required to enable these diverse groups to connect
- **Supporting increases in volume through integrated IT capabilities and emerging new technologies** – commitment to innovative technology to support the model of care for comprehensive telehealth provision in the following areas:
 - Operational management (e.g. scheduling)
 - Clinical Management (e.g. sharing clinical records)
 - Patient care experience (e.g. more consistent and efficient care delivery and providing patients and their families with greater control of their health)
 - Integrated Care (e.g. case conferencing across settings)
 - Reporting (counting and costing)
 - Evidence Base supporting data analytics and the ability to benchmark performance
 - Teaching and learning (e.g. education for clinicians and patients)
 - Mobile and cloud to reduce the need for expensive equipment that can only be used in a few locations.
- **Driving volume through engagement with both patients and clinicians** – through a defined engagement strategy to promote the benefits of telehealth and drive uptake as a mainstream service model.

The remainder of this submission outlines the individual key areas in detail. It describes relevant examples relating to the current state of play, barriers to further telehealth and considerations based on best practice and available IT capabilities.

Develop a clear understanding of the addressable patient cohort

Current state of play

- We understand from Queensland Health data that in the past 18 months, over 30,300 non-admitted telehealth occasions of service were provided in Queensland. This represents high growth, but remains a small percentage of the total occasions of service.

- CMBS data from 2012-13 shows that Queensland recorded over 14,350 specialist video consultation telehealth services. This represents a small portion of total number of consultations able to be serviced by telehealth in this period in Queensland was almost 5 million or 1.6 million services based on the assumption that 32% of the population living outside metropolitan areas
- We understand from Queensland Health data that in the past 18 months approximately 19,000 mental health services were provided through telehealth in Queensland
- We understand from Queensland Health data that in the past 18 months there were approximately 1,000 inpatient telehealth services reported in Queensland.
- Whilst these numbers represent present telehealth activity, there is no clear understanding or targeting of the likely cohorts amenable to telehealth that could be alternatively/better managed via this medium, for example;
 - Outpatient specialist services provided face to face that could be provided as telehealth
 - Other potential cohorts; patients who experience barriers to receiving healthcare, such as patients residing in residential aged care facilities and specialists who may be more amenable to telehealth
 - Gaps in service for populations traditionally serviced by non government providers, such as Aboriginal and Torres Strait Islander Australians

Barriers to further telehealth

- The ability to mine current datasets across multiple providers to identify the true volumes of telehealth amenable activity does not exist.
- There is no clear 'future state' guiding the implementation of telehealth. Growth in implementation is focused on best efforts by champion clinicians rather than a targeted growth strategy driving volumes which will improve efficiency and sustainability.
- This limited understanding of amenable clinical use cases means that the success of telehealth is often assessed on the reliability of the technology rather than the improved social and clinical outcomes the service model provides in comparison to standard care.

Considerations for the Queensland government

- Clearly understanding the service components required in these clinical cohorts will inform a better understanding of those conditions which can be prioritised for management in a telehealth setting
- Setting targets in relation to telehealth service provision would provide a clear direction to inform the planning and implementation of telehealth services. As demonstrated in the successful Queensland approach to the achievement of both the National Elective Surgery Targets (NEST) and the National Emergency Access Targets (NEAT), targets align providers in the achievement of a common goal and promote innovation because resources are focused on achievement.

Identify count and cost of telehealth to inform funding models

Current state of play

- The counting rules for the Queensland ABF Model for Telehealth are such that a telehealth occasion of service can be reported once by the provider (where the patient is located off campus) and once by the recipient facility (where the patient was located). Each facility reports against provider type and clinic type that best matches the service provided. Each 'end' is funded at the national model price weight for the calculation. Queensland's rules differ to the national counting rules, derived from the patient

perspective, that stipulate that service events can only be counted once. These two services will be reported as one service event against the hospital where the patient was located. In Queensland, localisation has been introduced to maintain and incentivise hospital participation in telehealth consultations and support a new rural telehealth

- At present, private specialist telehealth care is provided and recorded through the Commonwealth Medicare Benefits Scheme (CMBS) data and public hospital non-admitted care collected through the Tier 2 classification and reported to the Independent Hospital Pricing Authority (IHPA).
- The cost of service delivery via telehealth is not understood in detail
- Standard Tier 2 payments are applied to fund non-admitted activity, CMBS funds other private specialist activity

Barriers to further telehealth

- Sustainability of dual funding in the long term when telehealth uptake increases
- Current costing does not acknowledge the different resources required by both 'providers' of telehealth services and those 'receiving' the service.
- Current funding models do not incentivise telehealth service delivery over face-to-face delivery
- Current funding models do not consider patient cohorts other than non-metropolitan patients, nor other provider types such as NGO organisations.

Considerations for the Queensland Government

- To drive telehealth volumes, the funding model for telehealth should incentivise local telehealth delivery and, where telehealth is the suitable mode of delivery, make it more attractive for health providers to provide services via telehealth over face-to-face delivery.
- In the face of driving increased telehealth uptake, there is a need to develop cost weights which appropriately reflect the resources required on both the provider and receiver end of telehealth services. This work should be progressed through the Independent Health Pricing Authority (IHPA) to ensure a consistent national approach.
- New funding models should look to include incentivising telehealth for new patient cohorts, such as others experiencing barriers to health care access for reasons aside from residing in non-metropolitan locations
- New funding models should look to incentivise telehealth for NGO providers so that patients requiring complex care have more options to receive services via telehealth.

Partnerships with multiple providers for growth and access

Current state of play

- Currently telehealth in Queensland is provided by a dedicated network.
- Queensland's Rural Telehealth Service is one dedicated program that will improve access to healthcare services for those living outside of Queensland's metropolitan locales. Some remote communities are not serviced by government services and thus will not accrue the benefits of telehealth.
- Options for partnerships with providers external to Queensland health are being considered.

Barriers to further telehealth

- Distance is not the only barrier to receiving healthcare. Mobility, age and choice are other reasons that people are not able to easily access health care.

- At present, there is an inability for NGOs, such as Aboriginal Medical Services and other types of organisations to be involved in the Queensland network, forcing them to use their own telehealth networks to connect that are not only costly to maintain (a deterrent to uptake) but also may be insecure.
- As providers move between employers, there is no standardised easy way to use telehealth, different methods of application may deter uptake.

Considerations for the Queensland government

- To fully realise equity of access, connecting non-government providers will be important. External partners such as GPs, private specialists, Aboriginal Medical Services and home nursing providers. This would enable the consumer to access telehealth services from their home, Residential Aged Care Facility or other location of convenience.
- Extending the network to connect to other jurisdictions and large non-government organisations will facilitate the seamless provision of telehealth services, including across jurisdictions. For this to be successful, partnership and arrangements with and between government and non-government health providers will be necessary, so that patients experience the same access to specialist care, regardless of location.
- Managing this myriad of providers, connection points, technology and the billing associated with integrated telehealth service delivery is a massive undertaking. Telstra would suggest that this would require either a significant investment from government to establish and maintain or alternatively the development of a public/private partnership with Telstra as Australia's leading telecommunications provider. This partnership would not only leverage access to already established networks but also the supporting business infrastructure in relation to service support, billing and existing customer relationships.
- Under this partnership a dedicated 'telehealth body' would assume responsibility for many of the other recommendations required to increase utilisation of telehealth as a service model, including:
 - Research to support the development of an evidence base
 - Consumer and clinician engagement in the promotion of telehealth
 - Work in partnership with jurisdictional funding bodies to drive telehealth payment mechanisms
 - Responsibility for setting and reporting telehealth service and outcome targets and facilitation of health services efforts to achieve these targets.

Supporting increases in volume through integrated IT capabilities

Current state of play

- In Queensland the telehealth network, already includes IT capabilities that facilitate care delivery, including integration with existing referral networks and technologies such as store and forward.
- World over there are a number of established eHealth technologies. Many of these are also in place in Queensland today. As well, there are multiple emerging technologies that are increasingly entering the market. The table below lists some of these:

Established eHealth technologies used in telehealth service delivery models	Emerging eHealth technologies used in telehealth service delivery models
<ul style="list-style-type: none"> • Nurse Call Centre • Fixed videoconferencing • Home health monitoring devices – 	<ul style="list-style-type: none"> • Mobile videoconferencing consultations • Home and mobile health monitoring connected to provider and consumer health portals

- stand-alone
- On-line health advice – passive viewing
- Store and forward capability
- Definitive treatment on-line – doctor consultations, e-prescribing
- Chronic disease management and care co-ordination, using – wireless monitoring, health record, call centre, on-line treatment
- Productivity technologies – SMS reminders, scheduling
- Consumer self-service – pathology referrals, medication orders, on-line booking, reporting
- Mobile applications – eg i-Phone ECG
- Connecting islands of information – interoperability, exchanges, PCEHR, store & forward through a health information exchange
- Tele-education - teaching and learning, supervision and support via tele-delivery
- Data analytics – understand performance and quality outcomes benchmarked against other models of care

Barriers to further telehealth

- Barriers to expanding telehealth technology to include solutions such as those listed above include:
 - the integration of end points and current technologies with local systems. Multiple and disparate manual and computer process prevent telehealth becoming a viable alternative to making the patient or provider travel great distances at large time cost.
 - The perceived cost to install and use telehealth technologies.
- Overcoming these barriers will require both technical and clinical perspectives working in tandem so that telehealth is embedded into everyday practice. Some key technical and clinical requirements driving telehealth uptake in an end to end solution that includes enabling solutions are:
 - Clear understanding and support of the desired clinical outcomes required
 - Highly reliable network infrastructure with redundancy, security and quality of service
 - User friendly and intuitive telehealth user interfaces
 - Suitable training and credentialing of clinical staff
 - Responsive support infrastructure
 - Integration of telehealth delivery into workflows including scheduling, reporting, billing and clinical documentation
 - Consideration of the role of the patient including privacy and consent
 - Sustainable cost structure, both in capital and operating terms.

Considerations for the Queensland Government

- Whilst telehealth currently exists as isolated networks both in Queensland and Australia-wide, Telstra would see that connecting them into a national telehealth connection service would allow providers both public and private to connect within and between jurisdictions to allow telehealth to be an accessible model of care for everyone. For example, patients requiring complex care often receive this from multiple providers, funded from different sources. A single telehealth connection point that enables government and non-

government providers to link will provide a more integrated model of care to these patients. As well, this could extend to patients who require care from multiple jurisdictions.

- The provider's telehealth experience could be enhanced where supported by the ability for the GP/local clinician to schedule an appointment in a single-view calendar. The scheduling capability will also enable data collection of scheduled telehealth visits by patient, provider and clinic type, facilitating activity reporting and analysis.
- Functionality for clinicians at both ends to view patient information, such as a discharge summary electronically at the point of service will improve the telehealth experience for both patient and provider.
- Data analytics focused on telehealth will enable:
 - Identification of progress on targets
 - Analysis of the quality of care that telehealth delivers in the context of other models of care. Data analytics enables continuously assessment of telehealth as an effective care delivery mode.

Driving volume through clinician and patient engagement

Current State of play

- In the not too distant past, the majority of renal dialysis was provided within acute care settings. Changing expectations of both patients and clinicians in regard to this pathway has delivered dramatic change such that this care which was once considered inappropriate for management outside the hospital is now managed by 50% of patients independently within their own homes. Acceptance and uptake of new models is driven by those using the technology, the more positive exposure there is, the speedier the service can be scaled.
- While there are some excellent clinical case studies available within the Queensland telehealth context, there is no clear approach to broadly promoting current telehealth success stories across service settings to promote uptake.
- Current patient exposure to telehealth is limited to when the patient is actually receiving the service.

Barriers to further telehealth

- General limited awareness of telehealth and its benefits for both patients and clinicians.
- Limited patient exposure perpetuates the understanding that this approach to delivering care is 'new'/'alternative'/'a trial', translating to reduced quality from the perspective of the patient.

Considerations for the Queensland Government

- The development of a telehealth promotion campaign for the public identifying the benefits of telehealth to both patients and service providers is required.
- Mainstreaming access to telehealth (e.g. include your telehealth connection on your monthly phone bill) builds confidence that this method of care is the 'norm'.
- Investment in showcase sites for telehealth provision will provide peer examples of the successful transition from face to face services to telehealth provision.

3. Telehealth in the future

Telehealth has the potential to provide access to specialist healthcare regardless of location. Telstra's submission outlines a number of key considerations that we believe to be instrumental the support this future state in Queensland.

To drive greater access, supporting current delivery as well as reconsidering which health services are amenable to telehealth are both required steps. Engagement with the stakeholders both from the provider and patient perspectives will be critical.

Long term telehealth success will see Queensland realise the evidenced outcomes of telehealth as exemplified in local pockets of excellence and other international models. The establishment, maintenance and ongoing sustainability of telehealth in Queensland will depend on IT capability that is supported and delivered in partnership with the providers and users of this technology. In addition, ongoing evaluation will be critical to continually understand telehealth activity volume, cost and uptake as well as to articulate the costs and benefits of telehealth service delivery.