



HEALTH AND COMMUNITY SERVICES COMMITTEE

Members present:

Mr TJ Ruthenberg MP (Chair)
Mrs JR Miller MP (Deputy Chair)
Ms RM Bates MP
Dr AR Douglas MP
Mr JD Hathaway MP
Mr DE Shuttleworth MP

Staff present:

Ms S Cawcutt (Research Director)
Ms K Dalladay (Principal Research Officer)

PUBLIC BRIEFING—INQUIRY INTO TELEHEALTH SERVICES IN QUEENSLAND

TRANSCRIPT OF PROCEEDINGS

WEDNESDAY, 5 MARCH 2014

Brisbane

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Committee met at 10.58 am

BRYETT, Mr Andrew, Director, Telehealth Services, Clinical Access and Redesign Unit, Health Systems Innovation Branch, Health Services and Clinical Innovation Division, Queensland Health

CLEARY, Dr Michael, Deputy Director-General, Health Services and Clinical Innovation Division, Queensland Health

PHILLIPS, Ms Jan, Executive Director, Health Systems Innovation Branch, Health Services and Clinical Innovation Division, Queensland Health

CHAIR: Good morning and welcome. I declare open the Health and Community Services Committee public briefing for the committee's inquiry into telehealth services in Queensland. We will be briefed today by officials from the Department of Health. My name is Trev Ruthenberg. I am the member for Kallangur and chair of the committee. Here with me today are Mrs Jo-Ann Miller MP, deputy chair and member for Bundamba; Ms Ros Bates MP, member for Mudgeeraba; Dr Alex Douglas MP, member for Gaven; Mr John Hathaway MP, member for Townsville; Mr Dale Shuttleworth MP, member for Ferny Grove; and we have an apology from Mr John Krause MP, member for Beaudesert.

Welcome to the officials from the Health Services and Clinical Innovation Division of the Department of Health. The committee has asked the department to brief it today on the scope and use of existing telehealth services, current and previous pilot or demonstration projects and details of the proposed rural telehealth service. We have asked for details of progress and implementation of the rural telehealth service, including establishment of pilot sites, I believe they are being called evaluation sites, and the department's plans to evaluate the pilots.

I remind those present that these proceedings are similar to parliament and are subject to the Legislative Assembly's standing rules and orders. Mobile phones should be turned off or to silent, please. Hansard is making a transcript of proceedings. The committee intends to publish the transcript of today's proceedings unless there is good reason not to. Our proceedings today are also being broadcast live on the parliamentary website. I invite Dr Cleary to please start and then hand over to your colleagues as you see fit.

Dr Cleary: Thank you, and thank you very much to the committee for giving us the opportunity to speak about telehealth which the three of us have been involved in for quite a period of time, either managing systems and processes that deploy these networks or actually using them in real life. Jan, by way of background, has an allied health background. Andrew has a nursing background. We were of a view that this program is very much a clinical program and in terms of the leadership we have within the department it is led by a registered nurse, an allied health professional and I have an oversight role.

In terms of the program, and thank you very much for the opportunity to provide some introductory comments, through the launch of the Blueprint for Better Healthcare in Queensland the state government has committed to delivering revitalised public health services that provide high-quality, safe and sustainable services to all Queenslanders. It is noteworthy that with the development of new technologies and the integration of these technologies into clinical practices that rural and remote services or rural and remote communities have an opportunity to improve their access to a broader range of health services than they currently do. This direction aligns with the goals as outlined in the blueprint.

It is also evident that the historical service delivery models may need to be changed—these are the models that are in place in rural and remote communities—and that there is an opportunity for us to look at new models of service delivery given that we now have telehealth infrastructure that is able to provide a considerable amount of support in terms of rural and remote health service provision. There are a range of solutions that are being deployed and they are building on the existing successes in Queensland with telehealth. One of those I would mention would be the Brisbane

13HEALTH call centre, which takes a considerable number of calls from the community in relation to health issues each year, and the emergency retrieval network which Andrew will speak on in a moment. Certainly those services have been well developed and are flourishing in terms of the way they are supporting patients and the community. A more specialised solution that targets rural and remote communities is the rural telehealth service. This service will enhance local access to a range of admitted and non-admitted and emergency services. The new models will provide access to a new generation of safe and sustainable health care for residents and people who are travelling through remote and rural communities. The staged implementation of the rural telehealth service is being progressed and will include a rollout to, as you have indicated, seven evaluation sites in the 2013-14 financial year.

Telehealth is and remains a strategic priority for the Queensland public health system. Strategic objective 2.6 in the department's strategic plan articulates a commitment to enable access to safe, sustainable care for rural and remote communities through state-wide telehealth services. The committee no doubt would also be interested to know that Queensland currently has the largest managed telehealth network in Australia with over 2,000 systems deployed in over 200 hospitals and community facilities supporting more than 40 clinical specialties and subspecialties across the state.

To move on quickly to talk about the background to telehealth, telehealth is the delivery of health services and information using telecommunications technology. I am aware that the committee is familiar with that. It is not just video conferencing, it is much more than that. It is live interactive video-audio links for telecommunications both for clinical and for educational purposes. It includes store and forward telehealth, which is where you have digital images or videos and clinical data that could be stored on a computer and forwarded to another location to be studied by a specialist. It is teleradiology for remote reporting and providing clinical advice on diagnostic imaging and it can be telehealth services and equipment for home monitoring of health. So, it is a very broad spectrum of services, not just what often is portrayed as a video conferencing link using health providers.

Sufficient network infrastructure and bandwidth is required to ensure the quality of services in terms of the image and sound quality and to allow multiple locations at the same time. That has been one of the activities that has been going on for some years: to put appropriate infrastructure and bandwidth into our hospital system. Expanding the use of telehealth can help improve equity of access to high-quality, safe services and bring services closer to patients in rural and remote locations. This supports clinicians also to deliver those services locally. The benefits of telehealth include improving access to care, reducing travel and inconvenience and the social cost to individuals having to travel to larger centres for care; enhancing opportunities for education and training; and improved networking and communications between hospitals and health services and the public and private sector. Telehealth may be used in the delivery of a range of clinical services, including non-admitted patients or outpatients, admitted patients and emergency patients.

There are multiple factors that affect the take-up of telehealth and they include the proximity of the patient to the clinical service that is required; access and acceptance of patients and providers; the ease of use of the equipment that is available; the technology being fit-for-purpose; support to coordinate the logistics—and I think that is an important one: we have very busy health professionals and they do need some support to make sure the technology operates effectively; funding and reimbursement models are also important so that we have the right incentives in the health system to encourage people to use telehealth; and sharing access to clinical information and support systems, such as scheduling and service directories so that the arrangement of a telehealth consultation can be undertaken.

Telehealth can also help address a number of health service delivery challenges, including population growth, the ageing population, some of the difficulties with cultural diversity and the geographically dispersed population in Queensland. As the committee would know, we are the most geographically dispersed state in Australia. We also have the challenge of the increasing number of people with chronic disease and a number of smaller communities that require health service provision. Within the department we are looking at ways to extend that capacity and telehealth is certainly a very key driver that will allow us to meet those demands using that type of technology. Fully realising the benefits of telehealth will enable access to health care for patients in remote communities and reduce family disruption and the social costs, as I have mentioned.

Telehealth also complements rather than replaces face-to-face clinical interactions. Again there is often a perception that you can completely replace an interaction with a telehealth consultation. The experience in Australia and overseas is that it goes a significant way to doing that

but there still is a need for face-to-face patient provider interactions to enable multidisciplinary teams to communicate well. The information exchange can often be enhanced using telehealth, where there may be a more senior health provider who can interact with a patient and a clinician in a remote location. We have certainly seen that with our orthopaedic services where we have a senior orthopaedic surgeon in Brisbane, for example, who now runs an outpatient clinic regularly through western Queensland where he consults with patients in remote locations but there is always a health provider in the room with the patient during those consultations. Telehealth also has the ability to improve patient safety and obvious efficiency gains from reducing travel. In terms of some of the other areas that we thought we would touch on this morning, Ms Phillips would like to now talk through some of the important aspects of engagement with some of the staff and the stakeholders.

Ms Phillips: Thank you. Creating and maintaining productive relationships with stakeholders is essential, of course, to organisational and program success. These relationships drive business decisions and business outcomes through understanding what is important and relevant to those who we partner, serve and support, providing them with a realistic understanding of our services and capabilities and helping manage expectations. Identification and engagement with our stakeholders at each level of the health system will result in improved uptake. We need to work with our internal and external stakeholders to embed telehealth into everyday services as an accepted and supported enabler of health care for all Queenslanders.

In Queensland the majority of innovators and supportive early adopters have already taken up telehealth and the focus of engagement should now be on expanding on that success. There is also an opportunity to engage and collaborate with the broader health sector, working with public and private health service providers and support agencies to develop telehealth enabled models that support care. Specific support and activity is required to increase the uptake of telehealth, engaging the clinical workforce across the health sector to adopt telehealth as an accepted and supported service delivery modality.

In terms of change management, telehealth is successfully being used to provide a range of health care services across the state. Widespread and systematic adoption of telehealth enabled models of care requires ongoing engagement and promotion across the stakeholder groups, in particular with the clinical workforce. Promoting, planning, implementing, provisioning, monitoring and reporting the benefits of telehealth enabled service delivery requires the department to continue to focus on engaging with clinical groups to understand their clinical practice and expertise to allow us to determine how telehealth can best be utilised to support the model of care. We will also continue to support planning and implementation activities and provide resources to evaluate and to communicate success.

In managing change across the new telehealth program we are focusing on a range of enabling factors, systems and processes. Evidence and experience tells us that we need clinical champions within the health system to drive innovation and normalisation of telehealth as a medium to deliver quality care. We are also working to harness the extensive body of work and clinical and administrative knowledge that exists in the public, private and not-for-profit health and educational sectors to enhance and unify telehealth services within Queensland. We are working to enhance relationships between Medicare Locals, non-government organisations and hospital and health services to develop strategic partnerships and broaden the telehealth capability to identify opportunities and manage services across the continuum. We are working to support the development and dissemination of standards providing guidance to ensure compatibility and interoperability of telehealth capabilities across the public and private health care sectors. We are developing coordination, administration and support capabilities required to maximise the use of our telehealth capabilities and manage logistical requirements for patients and care providers. We have established governance arrangements to oversee and manage the progressive expansion of Queensland's telehealth service and guide the implementation of telehealth programs. We have incentivised the uptake of telehealth in Queensland through localisation of the national activity based funding model, recognising and funding the contribution of both specialist providers and patient end support clinicians. We have introduced new purchasing incentives to promote and encourage adoption. We are investigating innovative applications of existing technologies and exploring technical solutions to provide greater access to reduced cost mobile and low bandwidth solutions. We are reviewing clinical use cases to understand and assess clinical need, supporting re-design of clinical work flow and ensuring fit-for-purpose solutions are designed and procured. We are focusing our adoption and change management efforts across a number of broad areas to create an environment for engagement between lead implementers and majority followers,

promoting a sector-wide approach, removing complexity and risk associated with the use of telehealth and incentivising uptake. Andrew is now going to talk to us about some of the technology aspects of the implementation.

Mr Bryett: There are currently over 2,000 videoconferencing systems deployed across the state, as Dr Cleary commented earlier. Of those, 1,409 are hardware based systems and 596 are software based systems. In the three months October to December 2013 there were 26,600 videoconference calls for both clinical and administrative purposes. The systems had a combined usage of 30,845 hours, with each system used on average 7.7 times a month for a duration of 8.9 hours per month. What we really want to talk about is the service delivery aspects in terms of what that technical infrastructure is used for. With regard to the non-admitted or outpatient telehealth occasions of service, in 2012-13 there were 17,440 non-admitted telehealth occasions of service and in year to date 2013-14, that is July to January, there have been 12,879 occasions of service that have been reported. This represents a 34 per cent increase on the comparative period of July to January in 2012-13.

The most frequent non-admitted specialist services delivered using telehealth are diabetes, oncology, gastroenterology, mental health, paediatrics, general medicine, orthopaedics, preadmission clinics, cardiology, midwifery and obstetrics. However, there are over 40 specialties and subspecialties that use this enabling technology to deliver services. Whilst non-admitted telehealth activity has shown promising growth in recent times, these numbers really represent only a small proportion of the more than 3.4 million outpatient occasions of service that were delivered last financial year in the public hospital system. The volume of consultations delivered and the wide range of specialist services amenable to telehealth indicate an opportunity to grow these services across the state.

In regard to mental health activity, in 2012-13 there were 11,709 telehealth provisions of service and in year to date, again July to January, there has been 7,622. This represents an 18 per cent increase on the comparative period in the previous year. In regard to admitted inpatient telehealth events, in 2012-13 there were 668 admitted patient telehealth events reported and in 2013-14 year to date there have been 315. Admitted patient telehealth services are predominantly used to deliver remote intensive care management advice and support with some use for geriatric and stroke services. With the introduction of new inpatient purchasing incentives from 1 July 2014 these numbers are expected to increase.

Retrieval Services Queensland has developed the first dedicated state-wide telehealth service to improve the process of referral for aeromedical transfer of patients in Australia. Following the installation of videoconferencing capability in the resuscitation area of regional and rural facilities the system allows for two-way visualisation and conversation between staff, patients and their families at the referring facility and the Retrieval Services Queensland medical coordinator at the Queensland emergency medical system coordination centre in either Brisbane or Townsville.

Referring clinicians or the Retrieval Services Queensland medical coordinator can initiate a telehealth consultation at any time during the referral process. Retrieval Services Queensland staff dial in to the referring facility's connection and control all aspects of the system including camera angles and zoom functions so they can control what they are seeing from the provider end. Clinicians at the regional facility are then freed up to focus on patient care and treatment instead of having to mess around with the technologies.

There are 109 rural and remote facilities equipped to link with retrieval services around the state. In 2012-13, 123 consultations were delivered to support stabilisation and aeromedical retrieval of critical patients and in 2013-14, 75 consultations have been delivered July to January. We have also invested in the new rural and remote program, and I will hand back to Dr Cleary to cover off on those initiatives.

Dr Cleary: The committee may be interested to know that Andrew has taken the lead role in deploying telehealth across the state and has done so for many years. He has undertaken a tremendous amount of work to get Queensland Health in the position that we are in now. I will move on, though, to discuss the rural telehealth service. The government has approved funding of \$30.9 million over four years to establish a rural telehealth service to enhance telehealth models of care, improve access to specialist consultation and provide emergency management advice and support across the state with an emphasis on improving access to clinical services in rural and remote communities. The implementation of the rural telehealth service is being enabled through the hospital and health services and the boards and through the provision of tools, support, and technical capability and advice so that those health services can establish the state-of-the-art systems. The rural telehealth service is capitalising on the existing telehealth investment and

infrastructure in the state to enable better access to services for people within rural and remote communities. The service is also seeking to develop more effective and broader engagement with clinicians, managers and the communities in the areas that they are targeting to make sure that the models of telehealth are appropriate for that community.

Seven evaluation sites were announced by the minister in July 2013. Targeted or identified were Alpha, Eidsvold, Moura, Kowanyama, Normanton, Roma and Bedourie. Whilst the seven sites are the focus of the initial implementation schedule, the implementation is not limited to those sites. So if a health service or a board seeks to expand the model in their own local area, then they have the ability to do that and we would obviously be very supportive of those types of initiatives.

To support the implementation of the new telehealth agenda, we have established a governance committee which provides oversight of the telehealth program. The committee provides leadership to facilitate cross-sector integration—that is the public-private sector integration—change management and supports effective engagement with the internal and external stakeholders as well as overseeing the planning and the effective implementation of the change. The governance committee is chaired by Dr Ewen McPhee, who is a rural general practitioner from Emerald and has had a long and very significant history in developing rural health services but also rural telemedicine. The committee includes organisations such as the Royal Flying Doctor Service, the University of Queensland, the Rural Doctors Association, the Australian Medical Association, the Australian College of Rural and Remote Medicine and the Mount Isa Centre for Rural and Remote Health. Implementation of programs is occurring. There are really two streams of work that are being driven. The first stream is scheduled care, which you could say was very similar to outpatient care but it is where you can plan an interaction. The second is unscheduled care, and you could draw the analogy to emergency care, but they are not necessarily mutually exclusive.

In terms of the scheduled care, we are expanding the range and volume of telehealth enabled outpatient and inpatient services to rural and remote communities through the deployment of dedicated staff. A dedicated telehealth coordinator position has been established in each of the 17 hospital and health services across the state. An amount of \$1.6 million has been allocated to the hospital and health services this year and the initiative will continue growing to \$2.5 million per annum. The coordinators are responsible for progressing the telehealth agenda locally. So they provide that focal point for telehealth within the hospital and health service. They work with their state-wide network of peers to reach across both the hospital and health service that they work in and into the private sector, and they oversight the planning and implementation of the models of care that are being established. Earlier this year we had a full-day workshop to support skill development for these new roles in our hospital and health services. That was conducted in February 2014. The group received an overview of the strategic direction, the funding models, monitoring and reporting of telehealth, and approaches to stakeholder engagement. As Ms Phillips has indicated, this is a very important component of the program to engage and bring the stakeholders along with us. They are meeting regularly and further workshops are planned.

Queensland has also taken the lead nationally with a range of incentives to promote the uptake of telehealth. Queensland is the only jurisdiction with an activity based funding model that incorporates a very strong focus on telehealth. In February this year Queensland introduced further financial incentives with funding for non-admitted telehealth services being uncapped. By that I mean that the more activity you do, the more you will receive funding for it. So there is no restriction on the level of telehealth activity. There is a change to the funding model for inpatient activity which will commence on 1 July this year. Again, the incentives that need to be in place are being put in place.

The benefits of the additional resources and the incentives are already being realised with the 34 per cent growth that has been seen in non-admitted telehealth services over the last six months. With the introduction of the admitted patient incentives I think we will see a further increase in activity in that area. The unscheduled care—and this to some degree relates to my background in terms of being an emergency physician. I had the opportunity to participate fairly actively in this body of work. We were looking at enhancing the telehealth emergency management service that we already have in place, and that is coordinated through our centre in Brisbane. The model complements the existing services by working with the local health services and bringing together a network of service providers through a collaborative effort rather than through a hierarchical model. So it is really supporting local health service providers to deliver the best care possible.

The Telehealth Emergency Management Support Unit has been established at the Queensland Emergency Operations Centre at Kedron. An amount of \$1.5 million has been allocated this financial year and \$2.5 million will be allocated in future years to support the operation

of that centre. The Telehealth Emergency Management Support Unit provides 24-hour, single point contact for regional, rural and remote clinicians to access support and advice for the management of non-critical emergency patients via a 1800 number. The service has had an initial focus on the seven evaluation sites and these, as you know, were announced by the minister in the middle of last year.

The unit does not replace local services but enables the services to be enhanced and supported through provision of information from a central hub. The providers are located within the hospital and health services and the unit interacts with them to provide coordination and a connected service so that they may be able to provide care to patients locally that perhaps in the past they have not been able to provide locally and also to integrate their care needs into the broader health system.

The department has also established a telehealth support unit within the department of health to provide overarching support for the implementation of the rural telehealth service. The telehealth support unit provides support to hospitals, health services and primary care services to make sure that we are delivering on the government's commitment. The unit collaborates with a broad range of stakeholders including the hospital and health services, the department of health, the state-wide clinical networks of which there are 17, specialist, primary care providers and non-government organisations including the Medicare Locals. They as a collaborative are looking at how we roll out the telehealth initiative.

You also mentioned earlier the process around evaluation. We are planning to evaluate both the scheduled and unscheduled service delivery models with a multifaceted approach which will include a review of patient and clinician experiences, acceptance, access to the services by way of community service profiles and also a review of patient expenditure on the patient transport—PTSS—system to see if there has been a reduction in the expenditure in that area.

In terms of the more strategic view, currently the vast majority of our work has been done within the Queensland Health network. It is almost a closed network and that has supported clinicians in regional and rural Queensland. One of our desires is to start to open that network up to private health providers and non-government organisations, and there are a range of activities that we were going to undertake over the next six months or so to put those systems in place.

In closing, can I again thank the committee for the opportunity to present to you. I think this is a very exciting time for health in Queensland with the ability to deploy a telehealth infrastructure and service across the state. The process that has been put in place is one that is very much focused on community and community engagement to determine the services that are required locally. So that includes looking at what unscheduled services are required—so acute care—and looking at what scheduled services can be provided. Then we have built up from that the necessary infrastructure behind that. So that includes the scheduling of consultations with other specialists or the development of an emergency capacity within Brisbane to respond to acute problems in regional Queensland. We have put on top of that again a governance model and infrastructure within the department to support the rollout of this initiative across the state. On behalf of Ms Phillips and Andrew Bryett, I would like to thank you for your time in allowing us the opportunity to provide a summary.

CHAIR: Thank you, Dr Cleary, and to Ms Phillips and Mr Bryett. We are going to open it up to questions. Let me start. Ms Phillips, I did not take notes fast enough. You mentioned Medicare codes for practitioners' time. Did I hear you correctly to say there is some modification being made now so that if a specialist needs an item number to bill their time against Medicare that is now available for telehealth? Did I hear that correctly or am I misinterpreting that?

Ms Phillips: No. I did not say that. Andrew may be able to clarify some important work that is going on in that space at the moment.

Mr Bryett: Sure. Currently there are two funding models that can result in revenue for telehealth services—the first being the state based activity based funding model, which funds the Public Service delivery, and that is where the incentives that Dr Cleary spoke to are being introduced. The federal government did introduce new MBS billable telehealth items in 2011. They are somewhat constrained in the fact that there are geographical exclusion zones around the metros, and there are some distance requirements around the distance between the provider and the receiver. But, yes, there are MBS items that allow billing for consultations that occur between a general practitioner and a private specialist.

CHAIR: So right now we are substantially looking at state employed SMOs, for example, to provide that specialty requirement.

Mr Bryett: Absolutely. Currently there are state based providers delivering those services in both a public and a private capacity utilising the Queensland Health infrastructure to deliver those services again to public patients and to private patients.

CHAIR: Just going down that line, the federal government I think very recently—and I do not have my head around this very clearly—announced something around chronic disease control using telehealth. Do we have any understanding of how that might impact state capability and capacity?

Mr Bryett: The federal government announced a One in Four Lives program, which is around chronic disease management and is aimed at impacting, I believe, one in four people nationally. Telehealth is seen as a strong influencing factor in regard to the implementation of this program, and we need to have further discussion with our federal colleagues to better understand how we may collaborate so that the people of Queensland can gain benefit out of this federal initiative.

CHAIR: So are we looking at using existing or growing telehealth infrastructure that exists for the purposes of that program?

Dr Cleary: The program is still not clear in terms of what it will be delivering. There have been some earlier programs supported by the Commonwealth, not necessarily through Medicare. One of those was in North Queensland which looked at diabetes support. The challenge there, I think, was for the local providers to enrol an adequate number of patients in the program to make it a viable program. That was one of the difficulties that they experienced.

If I could just briefly go back to an earlier comment, the University of Queensland and the Princess Alexandra Hospital have a Centre for Online Health, which is based at PA Hospital. It is one of the largest services of its type in Australia. That is the centre from which many of the scheduled consultations that we have been supporting have been delivered from. They provide a range of specialty services from orthopaedics through to geriatric medicine. I think they are really turning ideas into action in being able to make it work. As you have indicated, a lot of it is driven from within the public sector certainly initially because there are significant benefits to us in being able to do that, and we can attract some private Medicare revenue as a consequence of treating private patients over those networks.

CHAIR: That leads to another question. I will ask one more and then I will hand over to the deputy chair. Are there incentives within our program for the use of similar type facilities but outside the network? I am looking at, for example, the use of Skype by practitioners for this purpose—so a practitioner in a more remote location using Skype to organise a meeting with a specialist somewhere in an urban centre, or wherever they are, and having a consult. Are there incentives for people to use that or are we particularly trying to get them to use the in-house system?

Mr Bryett: The technologies are emerging rapidly. Skype being the proprietary product that it does not interact with our technology environment. However, there are very similar products that are downloadable for free. There is a Cisco product, and a couple of other vendors have other software based videoconferencing clients that you can download to enable that interaction to occur across our network and also outside of our network—purely over the network if bandwidth is available. Clinicians are not being pinned down to a location. These services are virtual. So if they are delivering services utilising our technologies they can certainly be mobile with those. Whilst still having the security of accessing and delivering the service across the Queensland Health network, they can be located really anywhere geographically that we have adequate bandwidth.

Mrs MILLER: I am just wondering if you could tell us what the budget is for telehealth and also the number of staff involved in the rollout? You can take it on notice and let us know.

Dr Cleary: We might get some accurate figures for you because I think that might be more useful. The budget that we have for this particular new program is \$30.9 million over four years. The majority of staff are deployed in the hospital and health services, within their operational staff. There is a small unit that is assisting and facilitating the deployment of systems across the state.

Mrs MILLER: What I am looking for is everyone who is involved in the rollout by level. So I want to know the levels of the public servants, nurses or whatever, and the total cost of it. The other issue that I am obviously interested in is whether you have any officers who are working on outsourcing telehealth.

Dr Cleary: No. There is no program in place for telehealth. It is very much an in-house system. The service at Kedron is, I think, I will not say a world-class service but it is a first-class service and as good as any that I have seen in other countries when I have visited them. It may be that the committee would wish to visit that site and look at it and get a feel for how they operate. It

has been expanded, so it currently coordinates all of our emergency management across the state, such as the retrievals and transfers of critically ill and injured patients. It is now expanding into providing that acute care and consultative support for rural and remote areas of the state.

Mrs MILLER: But could telehealth be packaged up and sold off at any point in time? Is it possible for that to be done?

Dr Cleary: Telehealth, in my mind, is a core clinical service for health and one that would be very important for us to maintain. The partnership with the universities though I think is an important one. If you look at the work that the University of Queensland have done with their Centre for Online Health, they have been working in that space for probably 10 years—I cannot be precise on how long—and they have looked at a range of different areas that they can be involved with. Partly they have been undertaking research to identify how best to deploy telehealth but also they provide the clinical services. So I think the opportunity for partnerships is very important—partnerships with universities or other healthcare providers as time goes on.

Mrs MILLER: I suppose what I am alluding to here is the privatisation of telehealth, but anyway. I know you spoke about the patient transport subsidy system before. Can I just say be very careful about that, because I was in Rockhampton recently and, where there has been a system in place where a number of patients have been flown to Brisbane and back in a day, they are now putting them on the train, which means that there is a lot of cost now to the patients as well. So even though there might be a reduction in the cost of the patient transport subsidy system insofar as the HHS is concerned, there is an increase in the cost to the patients and their families. So I am just—

CHAIR: How does that relate to telehealth?

Mrs MILLER: Well, Dr Cleary brought up that he was going to be looking at the reduction in costs to the patient transport subsidy system—

CHAIR: Based on telehealth services.

Mrs MILLER: Yes, based on telehealth services, and I am just letting the good Dr Cleary be aware that I will be watching any so-called reduction in cost to the PTSS insofar as any increase in the cost to the patient is concerned.

CHAIR: We are getting very close to being out of order here.

Mrs MILLER: No, no.

CHAIR: Either bring a question or move forward.

Mrs MILLER: I am going to ask a question to Dr Cleary—and it is not out of order, Chair.

CHAIR: It is if I say it is out of order. Please bring your question forward.

Mrs MILLER: The question to Dr Cleary is: when you are going to consider the decreased costs in relation to telehealth and the patient transport subsidy system, are you also going to look into the increased cost for the patients if they have to travel to Brisbane by train and stay here longer?

Dr Cleary: Thank you very much. I think the approach we will be taking in terms of the evaluation is to look at the overall level of activity. The thrust of it would be that we want to see increased activity. We want to see that the increase in activity is activity that is appropriate in terms of the telehealth activity, and there may be some change in the PTSS arrangement. In terms of Rockhampton, I do not have the specific details with me today. But, as I recall, they have had something in the order of a 34 per cent increase in their expenditure on PTSS over the last 12 months—so quite a significant increase. Of the transfers, I think it is something in the order of 4,000 people travel by air and somewhere under 400 or around 400 people travel by train or bus. The profile of the patients there seems to be such that, notwithstanding the significant increase in the services that are being deployed into Rockhampton, there has still been a growth in the expenditure and the number of people that are travelling.

Rockhampton is a very important location. It is being developed substantially. As members would be aware, there is a significant expansion to the service with a regional cancer centre being developed. They have already started some of those services with an oncologist travelling to Rockhampton from the Princess Alexandra Hospital to provide oncology services. They have put in place telehealth. I think it is related to orthopaedics between Rockhampton and Gladstone and Emerald. They have put in place enhanced outreach services in terms of renal services into Gladstone.

I thank the deputy chair for the question. I think it flags a very important issue, and that is that we cannot look at any data in isolation because there is so much activity going on within health—Rockhampton being a good example—where it is developing very significant levels of speciality service. They are providing those locally. They are providing greater outreach services both in terms of the physical outreach services and the telehealth services. Within that construct they have also seen a sizeable increase in their PTSS expenditure. I think we will see that in many of the sites that we are looking at. The smaller sites perhaps less so because they will not be looking to expand to the same degree as Rockhampton is, which has put in place a regional cancer centre that will be a significant benefit to the local community.

Mr SHUTTLEWORTH: My question is directed to Mr Bryett. I think we have touched on the fact that probably one of the most significant constraints around the expansion and deployment of telehealth services, given the divergent nature of our state, is technology. I think you mentioned that you are still using essentially the proprietary health network—our own network. Are we looking to try to interface with a non-proprietary or a normal telecommunications carrier that would deliver a cheaper and far wider service in terms of bandwidth capacity to more remote regions than the current health network? Are we looking at some stage to try to enable that interface? I understand the security that is needed for the connection, so either through TAFE colleges, other government networks or the main telcos within the regions.

Mr Bryett: In the last few years technologies have leapt forward in terms of enabling videoconferencing to occur. Until a few years ago to allow this to occur we would have had to spend a lot of money on a large system. Much lower cost software based solutions are now available. As was commented earlier, some are free downloads. They work as long as the bandwidth is adequate. They work very well over the internet. Standards based solutions—unlike Skype, which is proprietary so it has its own language—which is what we have rolled out across the state, are compatible and allow interaction across a range of solutions as long as they use these same standards. What is also emerging is products around WebRTC, which is in-browser video where you will be able to load an application and send a link to someone and it will give you a secure connection to your colleague. That can occur within the Queensland Health network and outside the network. So we are certainly shifting into an environment where we are looking a lot more at low-cost mobile solutions that function within and across our network and external to our network.

Mr SHUTTLEWORTH: Can I assume, therefore, that in terms of time, cost of deployment and reach, they will expand quite significantly in the short- to medium-term?

Mr Bryett: Certainly. The figures that I commented on earlier regarding the 1,500 hardware based endpoints and the 500-odd software reflects the fact that we are moving a lot more towards these much lower cost and more mobile solutions. We can load the software clients onto tablets and onto various other devices to give people access to the Queensland Health network from their homes or from locations that are outside the traditional hospital walls.

Mr SHUTTLEWORTH: In terms of hardware, I assume they are older systems. If they are using the existing health network, there would be guaranteed service and so forth across it. So when you are undertaking that I guess there may be a degradation of normal data and VOIP type solutions into that same premise? Are we also looking to convert some of those—to move them away from that solution and onto the software based?

Mr Bryett: In terms of our asset replacement programs we always look at the use case in terms of what those systems are being utilised for. For some clinical purposes there is a requirement for large monitors and high-definition monitors to be able to deliver the clinical services. Where we are looking more at a talking heads experience, certainly we would look to swap assets out based on what is their use case and what is fit for purpose.

Dr Cleary: I think there is an opportunity now for us to be able to look at what is fit for purpose. In the past there was a very limited choice. If you are looking at the types of consultations that occur between the intensive care units in North Queensland and some of the larger units in Brisbane, that is a much more complicated system and requires a large bandwidth. If you look at the emergency network across the state, it requires a larger bandwidth and the technology is always going to be much more sophisticated, fixed units that allow the dial-in from the centre in Brisbane so that the local clinical staff can continue to manage the patient. It also gives them control over the devices. Perhaps some of the face-to-face consultations do not require such high definition. I think there will be that spread and people will look at what is fit for purpose.

As time goes on I think we will also see there are other areas that people will be looking at in terms of the store and forward functions. Not much has been made of those to date but reviewing X-rays in a regional centre can be done very rapidly now. Queensland has one of the most Brisbane

sophisticated BreastScreen reporting systems in place in Australia, and all of those are reported through a central hub although the radiologists are not necessarily all in that particular room. I think there are real opportunities for us to look at what is the best of breed as the market expands. There is probably also an opportunity for us to look at what is the best way to provide these services. Do we buy them in-house or do we look at remote hosted and managed services where a third party might provide some of that technology and maintain it for us going forward? I think there are lots of opportunities to look at both best of breed and the most cost-effective models for the deployment of technology.

Dr DOUGLAS: Thank you very much for your presentation. I congratulate you on what you are doing. Keep on going and good on you. Sometimes it is not always rewarded. I have used the system and I mentioned some things about it today. I think your answer to the question on the issue of Rockhampton was good in many ways. The way you answered it was good because of the issue of the patient transfer scheme and the growth in it but also the fact that Rockhampton is developing external cancer services and what is happening in that transition.

I had a patient who developed acute myeloid leukaemia three or four months ago in Cairns and the unit had been transferred at the royal—I was not going to say where he went. Having said that, as these systems develop, particularly with what has happened in Rocky, initially there are increases in patient transfers but ultimately the ambition is to be able to mould the services in such a way that regional people can access these systems and not necessarily have to do the movements. For things like bone marrow transplants, they are obviously going to have to come to Brisbane and they are going to be put up here, but if you just keep going with what you are doing and then you increase the services like you have said where they become more accessible to those people you will not believe how useful that will be. Last year there was a gap with this issue. To tell you the truth, I reckon you are almost closing it. You may have to wear this patient transfer thing for a while and obviously learn something out of the Cairns experience. The question is good because there is a learning experience. Sometimes people get carried away with cost and they suddenly think, 'Why is that rising?' It teaches you where you might be going in the future and where you will ultimately save a lot of money. So keep going with it and wear some of the baggage that goes with it.

CHAIR: Thank you for attending and for your presentation and your answers. I am sure between now and when the inquiry finishes we will be needing some clarification on different things as we visit different places and see things. I think it would be useful if we could continue to talk to you to seek some clarification or understanding of some of the things we might learn. The time allocated for the briefing has expired. I declare the briefing closed.

Committee adjourned at 11.56 am