HOUSE OF REPRESENTATIVES

STANDING COMMITTEE ON FAMILY AND COMMUNITY AFFAIRS

Reference: Health Information Management and Telemedicine

PERTH

Wednesday, 7 May 1997

OFFICIAL HANSARD REPORT

CANBERRA

HOUSE OF REPRESENTATIVES STANDING COMMITTEE
ON FAMILY AND COMMUNITY AFFAIRS

Members:

Mr Slipper (Chairman)
Mr Quick (Deputy Chairman)

Mr Ross Cameron	Mr Kerr
Ms Ellis	Ms Macklin
Mrs Elson	Mr Allan Morris
Mr Forrest	Dr Nelson
Mrs Elizabeth Grace	Mrs Vale
Mrs De-Anne Kelly	Mrs West

Matters referred for inquiry into and report on:

The potential of developments in information management and information technology in the health sector to improve health care delivery and to increase Australia's international competitiveness with particular reference to:

the current status of pilot projects already commenced and an evaluation of their potential for further development;

the costs and benefits of providing advanced telecommunications and computer technology to general practitioners and other health care professionals throughout Australia, particularly in rural and remote areas;

ethical, privacy and legal issues which may arise with wide application of this technology and transfer of confidential patient information;

the development of standards for the coding and dissemination of medical information;

the feasibility of Australia becoming a regional or international leader in the development and marketing of this new technology; and

the implications of the wider development and implementation of medical practice through telemedicine for public and private health outlays, including the Medicare Benefits Schedule.

WITNESSES

ANTHONISZ, Mr Keith Mark, Consultant, Technology and Innovation Management Pty Ltd 1045

JAYASURIYA, Dr Pradeep Harshan, Director, Perth, South Eastern Division of General Practice Ltd, 7/300 Albany Highway, Victoria Park, Western Australia 6100 1035

JORDAN, Mr Barry Keith, Coordinator, Telehealth, Commercial Services (IT) Branch, Health Department of Western Australia, 189 Royal Street, East Perth, Western Australia 6004 1013

LIE, Dr James Tjhouw Njin, Director, Great Southern Division of General Practice Ltd, Care of Albany Regional Hospital, Hardie Road, Albany, Western Australia 6330 1035

MARSHALL, Dr Jann, Senior Health Program Consultant, Clinical Services Directorate, Health Department of Western Australia, 189 Royal Street, East Perth, Western Australia 6004 1013

OTAGO, Mr John Vincent, 5 Steele Street, Eden Hill, Western Australia 1053

HOUSE OF REPRESENTATIVES

STANDING COMMITTEE ON FAMILY AND COMMUNITY AFFAIRS

Health information management and telemedicine

PERTH

Wednesday, 7 May 1997

Present

Mr Slipper (Chairman)

Mrs Elson

Mrs Elizabeth Grace

The committee met at 9.05 a.m.

Mr Slipper took the chair.

CHAIRMAN—Good morning, ladies and gentlemen. I am pleased to open this ninth day of public hearings on the inquiry of the committee into health information management and telemedicine as referred to the committee by the Minister for Health and Family Services, the Hon. Michael Wooldridge, in June last year. The committee is looking at a wide range of matters relating to the potential of developments in information management and information technology in the health sector to improve health care delivery and to increase Australia's international competitiveness.

The main issues to be resolved by the inquiry are: to establish an appropriate role for government in setting standards and guidelines for the evolving industry; to address issues of data security and privacy rights of patients; to examine the impact on the medical profession and the community generally of new procedures, enabling medicine to be practised across state, national and international boundaries; and to look at the strength of current Australian knowledge and expertise in the area.

The hearing today continues the program around state capital cities and is the last such hearing before concluding the public inquiry process, with two further inquiries scheduled for Canberra later this month and in June. The committee is also completing its inspections by visiting the Kintore community and the Pintubi Homelands Health Service in the Tanami Desert tomorrow. This inspection will provide an opportunity for members to observe at first hand the delivery of telemedicine and its applications to a remote community.

The committee will take evidence today from the state government of Western Australia, as well as several organisations representing the medical profession and other industry based bodies, and pursue ideas and questions raised at hearings to date. In this way the final report of the committee will provide the most current national information available which will assist the Commonwealth government in formulating policy in this new area of technology.

[9.05 a.m.]

CHAIRMAN—I ask the secretariat to invite the witnesses to swear an oath or make an affirmation.

JORDAN, Mr Barry Keith, Coordinator, Telehealth, Commercial Services (IT) Branch, Health Department of Western Australia, 189 Royal Street, East Perth, Western Australia 6004

MARSHALL, Dr Jann, Senior Health Program Consultant, Clinical Services Directorate, Health Department of Western Australia, 189 Royal Street, East Perth, Western Australia 6004

CHAIRMAN—I must say that the committee was most impressed with the submission by the government of Western Australian, and we have all read the *Bulletin* article in which Dr Marshall featured so prominently and, might I say, so positively. We have only three members of our committee here. All of us are from Queensland, interestingly enough. Many of the problems experienced in the area of telemedicine in Western Australia would no doubt be duplicated in a vast state like Queensland and so we have a very keen interest in what you are doing here, and we hope, of course, that what you have done will be able to assist us in our report, with a view to moving this technology along nationally when we present our report later this year.

As I said, we have seen the *Bulletin* article. We have also read carefully the submission from the government of Western Australia. I was wondering whether you might like in just a short space of time to summarise some of the key elements, to direct and focus our questioning.

Dr Marshall—Yes, I certainly would. I actually wrote out an update of what has happened after submitting that report.

CHAIRMAN—Could you present that to us after your evidence? We will receive it as evidence and circulate it to all members, including those who are not with us.

Dr Marshall—Okay. When we put the submission in it was very early days for us in the health department and I actually only had an hour to prepare that because we have been on leave, so it was a very rushed document.

CHAIRMAN—You are certainly a fast worker.

Dr Marshall—It was a very rushed little submission that we did put in. As I said, we were in very early stages, and I think we have certainly just now moved all of that on to the stage where what we have really done and have been doing, we feel, is actually very strong and we think it is incredibly applicable for Australia. So we would just really like to tell you about it basically. I do not know if you want me just to go through some of the points of what we have actually completed or just the concept of what we are

doing.

CHAIRMAN—You might just briefly summarise what is included in the additional submission so that we can factor that in when deciding what to ask you.

Dr Marshall—Okay. I will just start running through some of the things in that submission. The telepsychiatry service in the Kimberley and Pilbara has been installed, and it has actually been a worse situation than in Queensland in that the main problem facing our state is that our telecommunications are so poor and so unavailable that we cannot do anything with the existing structure and infrastructure.

CHAIRMAN—You are saying that would be partly the problem of the federal government not putting adequate telecommunications into rural Western Australia?

Dr Marshall—Basically, and where we have them, when we start testing them, they are not good enough for us to use. Even though we are told that we have ISDN that is going past these places and we make the links, it is just breaking down all the time. We are actually having really big problems.

CHAIRMAN—Are you saying the Commonwealth might be able to look at its maps and say, 'Telstra has in fact installed ISDN in theory, but in practice it is not there to be used effectively and efficiently'?

Dr Marshall—It is not reliable enough.

CHAIRMAN—And reliably.

Dr Marshall—It is not actually installed also in the places where we need to go, if we are talking rural and remote Western Australia.

CHAIRMAN—Hasn't the government made some pledge that there is going to be an ISDN roll-out, if that is the right word, throughout most of the country within a relatively short space of time?

Mr Jordan—That is true, but there are a great many areas where it is just totally impractical in fact for them to provide ISDN to some of the smaller communities. There is a difference between installing it and giving people access as well. There are places within this state and other states, but particularly this state, where the ISDN goes past or through cities, but the device that is required to connect the public to that link is not there, and it is only done on a business basis on the grounds that, if people will put the money up-front for the device—which is called a BMUX, a broad-band multiplexer—they will install it. Otherwise there has to be a business case, a requirement, to put it in.

CHAIRMAN—My understanding is this is a highly centralised state. It is a huge state, but highly centralised, whereas Queensland, while it is a large state, is decentralised and we have got a number of major centres of population which perhaps would assist the

economics of this new technology.

Dr Marshall—That is right.

Mr Jordan—You have a great many more ISDN tails, whereas we have a loop.

Dr Marshall—We actually are very familiar with telecommunications in Queensland, and we have been over to talk to people in Queensland about it; and you really are like flying in paradise compared to WA.

CHAIRMAN—Queensland is certainly paradise. We flew from paradise to be here.

Dr Marshall—I will just move on, because actually we will bring up that again.

CHAIRMAN—Could you, perhaps in greater detail, just give us a few words—not now, but subsequently—on what you think needs to be done in a technical sense to improve ISDN accessibility in rural Western Australia. There is no point in our recommending something if it is simply not technically possible.

Dr Marshall—We would really like that opportunity, because we do not believe that is the way to go for the whole of Australia in terms of costing. I will just run through some of these things. We have a very impressive teleradiology imaging service run by a private radiologist in this state, which I think is really quite a good model for a lot of rural places. It is mainly an ultrasound service, but they do CT scans, and it is what they call a PACS system. By February, when I last spoke to them, they had done over 60,000 ultrasound examinations since last July, and that is all in a PACS system. In a community that is actually spreading right across the whole of the south-west and they travel around with these mobile units transmitting the things into the radiologist's practice.

CHAIRMAN—How does he get paid if there is no—

Dr Marshall—Well, he gets paid. He can claim on Medicare for that because radiologists do not have to do a face to face thing. Radiology is the only thing that is different, because you do not have to do face to face; the same with pathology.

CHAIRMAN—But he would have to employ the person taking the mobile units.

Dr Marshall—He pays them out of his business, yes, but he is claiming on Medicare.

CHAIRMAN—Yes, so he would basically be at both ends of the set-up. He would be at the remote location, or his practice.

Dr Marshall—No. He sits in Busselton.

CHAIRMAN—Physically he would.

Dr Marshall—Physically he sits in Busselton.

CHAIRMAN—But his employees would be at the remote location.

Dr Marshall—They are travelling around.

CHAIRMAN—So it is not as though other people are in fact beaming him images. He in fact has his employees or his own business go out there.

Dr Marshall—Yes, they are sending them to him. But it is a very impressive set-up. I have seen many of the different systems that are happening, and it is certainly really very good. The health department also has some ultrasound mobile services, and I want to bring this up also because it is quite interesting. There is a training program in Kalgoorlie where they train sonographers for doing ultrasound, and we now are using them to go in the Kimberley and Pilbara to an increasing number of places, and those images are then sent to Port Hedland, to where the radiologist has a contract to do it.

I am telling you about that because it is actually very interesting, too, because that training program can be linked in as part of a telehealth system to keep monitoring quality and to keep the ongoing training, and I think there are a lot of issues involved with that in terms of keeping quality of services that need to be implemented when these things happen for rural and remote places.

CHAIRMAN—You are obviously referring to Dr Johnny Walker—it is a very interesting name, of course—with respect to his mobile ultrasound services. I do not think we have heard from Dr Walker, have we?

Dr Marshall—No.

CHAIRMAN—I think we might as a committee contact him and just ask him to let us have a letter setting out what he sees as being the advantages of what he is doing, the drawbacks, and where he thinks there should be perhaps some government policy considerations.

Dr Marshall—What he is doing is very impressive.

CHAIRMAN—So we will certainly contact him.

Dr Marshall—We will certainly give you the address and everything. All our contracts that we are now doing in terms of radiology—just to complete that—from the

health department are now all involving a telehealth component and a tele-ultrasound component into them, and there are probably about eight different contracts that are already existing where the private companies are now doing after-hour things for residents in hospitals in the country that do not have any backup, or even in the city. So there is quite a lot of that sort of thing already installed and going on. In the city it is very easy because they are using ordinary phone lines, and the ordinary phone lines are handling it.

In Johnny Walker's thing, for instance, they run their things on ordinary phone lines, and even our ordinary phone lines are not good enough. Basically, that has been the big frustration. They have had to put these links into their transmission so that it just automatically keeps on dialling and dialling and dialling. Usually it might even take all night to get this stuff sent, because our phone lines are not even good enough, are not even reliable enough, in the rural areas. It is really a big problem in this state.

The other thing that we have in the state that is very important for us in our concept of linking in what we feel should happen is that the health department has a big Intranet through all the hospitals, and that also extends out to rural zones.

CHAIRMAN—Intranet?

Dr Marshall—An Intranet. That works from a whole lot of different things. A lot of it is microwave. It is a combination: a bit of Telstra and a whole lot of different links to join that up. What is happening with that is we are just expanding that and moving that up in the broadband width all the time and overlaying different things on it. I just flag that one at the moment. We put out an international interest for bandwidth, as I mentioned in the report, last May. That has been evaluated and was really very interesting. We did not go for any specific bandwidth. Basically, we fielded many responses all round the world. Jumbo has followed up on all of those things. It has really been quite an incredible sort of thing for us. It actually paves the way in lots of ways for what will happen after deregulation, because we have that sort of information. I will bring that up again when we get on to what we feel should happen to solve the problems that we have.

As you might have read in the *Bulletin*, we decided we needed a new infrastructure. When we first started working, about the time we put the submission in, I said to Jumbo, 'Can you just find out what everyone else is doing? What do we have in the state?' We found out about the telecentre system that we have in the state, the WACRRM training facilities—various things. We put little dots on the map and said, 'That's great, but how about all these places that aren't covered in that? How can we aggregate together so we do not duplicate, and how can we start working?' We started setting up some meetings in Perth here, and this is really how we started getting the aggregation idea going. The aggregation was for two reasons: so that we would not duplicate any of the telecommunications and the equipment, and to share the costs. Thirdly—this has transpired from it—it means that you start getting communities involved in it and, therefore, it becomes an ownership thing: they can start seeing that it is good for

their whole community.

We started having meetings about last July in Perth with the education department, Justice, lawyers, Aboriginal groups, telecentres—a long range of people. It has been a very productive thing. A lot of things have happened just from having that communication. For instance, and it does not really relate to this, Westlink—which supplies TV out to rural and remote areas and the training—worked out that a lot of their satellite dishes were in places where there might be two dishes of the same thing in one town. They are moving them so that there will only be one of that type of dish in the town. It is about: 'Let's just spread the equipment out as far as we can to share things.'

CHAIRMAN—That makes a lot of sense.

Dr Marshall—That set up a whole lot of communication and getting that idea going. We also costed for the telecentres—and this is where some of the costings from the expression of interest were useful—what would happen if we installed a satellite based network for the whole state but, if we put a new satellite dish in your town which is a send and receive, the community could actually choose to take in all the services you could drop off the side. The sorts of services that telecentres were providing anyway were TAFE training and business things. What this would offer would be Internet, banking, ATM machines—because in many of the towns the banks are closing down—and video conferencing equipment, which we could use for telehealth also. The idea would be that you put the one satellite dish in these towns and the community can then decide what they wanted to use out of that. You would then make a local connection to the school; the GPs; the nursing post, if there is one; a hospital; justice people—whoever needed it. They would be just a local connection. You could now have a landline, a microwave—all sorts of different combinations—but the satellite, the connection, the point of presence, would be the shared facility managed possibly by the telecentre, if that was what the community wanted.

CHAIRMAN—And paid for?

Dr Marshall—We will talk about that. We are looking at enhancing what the telecentres have. We have basically taken that concept on further. We found when we were having these meetings and doing the costings—for instance, the banking; I have the costings here—that to put an ATM machine in for a town that had a bank close down and did not have any way of doing their banking that they have to pay expensive STD to call in. If they wanted to communicate with Perth, they would have just a local call to their satellite point of presence. If they wanted an ATM machine, the extra cost was only $1,200; if they wanted to install the whole system itself it was something like $12,000.

Mr Jordan—Yes, nearly 17 actually.

Dr Marshall—There were really big financial benefits that were found from doing

that. The whole idea of sharing and aggregating the equipment was really very attractive. The other thing that they could do from the satellite point of presence is to put a mobile phone tower off that which, say, the shire or someone could run. That would then give them a mobile phone system which they could have, which would last up to 30 kilometres round their community.

Mr Jordan—A privately owned one.

Dr Marshall—A privately owned one.

CHAIRMAN—Digital?

Dr Marshall—No, analog.

Mr Jordan—No, analog initially. The privately owned ones will certainly migrate to digital technology. The current wireless loop or cellular phone systems are analog. Analog systems have a greater range and they are not as subject to drop-out, because of terrain reasons and communications considerations, as the digital ones are. They are also cheaper to produce. It is a mature technology that we export off our shore.

CHAIRMAN—Dr Marshall, if I can just bring you back to the cost of these.

Dr Marshall—I just want to give you a little more concept, if I could.

CHAIRMAN—Alright.

Dr Marshall—I can give you costings. When we looked at the way it could work, there was no question that a satellite based system was not going to be the cheapest option, I believe, not just for Western Australia but for all sorts of activities all round Australia.

CHAIRMAN—Sorry—no question that it would be the most cost-efficient system? I think you said it was not.

Dr Marshall—It seems very obvious to us that this is the best way to go not only for us but also for the rest of Australia. The reason for that is that, depending on the number of sites that you have connected into a satellite system, the number of hours and all those sorts of things, basically the costings, the difference in charges—what you need to pay for the use of the services—is just so low compared with the ISDN charges. I have got the costings here. Basically, if you have a graph where that is your costs and this is the number of sites or the number of hours these things are used—whatever—the satellite costs go along and are steady. What you do with the satellite network is you buy some bandwidth up-front.

The costings we have for that—we based it on last November—are about $170,000 to get about a 384K bandwidth for the whole state. If you start looking at the ISDN charges as sites and things go up, at 128K, which is what they use up in North Queensland, your costings do that, as does the 384K—and so it keeps on going. This would do our whole state at this constant rate. The only difference is that you pay for your cost up-front. You have to pay your phone bill and your video conferencing bill before you start the year, but you have got that bandwidth.

CHAIRMAN—Why hasn't this concept been enthusiastically endorsed elsewhere?

Dr Marshall—I do not think it has been thought about. It hasn't been thought about, basically.

Mr Jordan—There are two big reasons, from my point of view: first of all, a lot of the technology has only become reasonably priced in recent times, but it has always been reasonably priced for the macro scenarios. Mining companies have been using it for a long time. The media in Australia, AAP-Reuters and organisations such as that, have been using this for a long time. My belief is that the biggest reason is the vested interests of the very large, until recently, monopolist carrier. There is a lot of infrastructure that has to be paid for.

CHAIRMAN—Dr Marshall, you might be kind enough to let us have those costings—not right now but in a paper to the secretariat. It seemed really interesting.

Mr Jordan—We have them here with us today.

Dr Marshall—It is really quite an impressive costing set-up. You asked me who pays for the satellite dish. I have got a community that I would really like to model. It is a community that is about four hours drive from Perth. I chose that because it is rural and remote enough for it to be a problem for people to access health care anyway. They have all the problems: they cannot keep health people there, et cetera. It is a little too far away from Perth for them to keep coming in.

CHAIRMAN—Are you at liberty to tell us where it is?

Dr Marshall—Yes. It is what we call the Upper Great Southern Health Service, which is based in Narrogin, which is their centre. It goes out to Hyden—quite a big area. They have 16 communities in that health service. Eleven of them have some form of health presence: maybe a GP, a nursing post, an aged care facility or something like that. Five of those communities do not have any health at all. With all of those communities we have been looking at the idea of aggregating their needs for telecommunications, putting the satellite dish on and then in each of those communities there will be different links that need to be made.

I have done really extensive talking with all the shires, with the boards—you name it. The communities themselves have done their community needs analysis. They think the whole idea is terrific. They themselves run with the ideas and they collate all these different things.

CHAIRMAN—Any drawbacks?

Dr Marshall—There has been nothing. For instance, it is really interesting when I go to talk to the GPs in various places, in groups. I can see these people sitting there thinking, 'I'm not into all this technology,' and all these sorts of things. All the usual 'always knowing' things come out. At the end of talking to them they are saying, 'I could be doing this better. I can do that. That would be just wonderful.' You end up with these incredibly enthusiastic people. We have not had one person who isn't solidly behind the whole thing.

CHAIRMAN—I understand that, because investment in cable roll-out to 94 per cent of the Australian population is proceeding, it is unlikely that it will be possible to stop this. Apparently there are differing views about the long-term viability of low orbit satellites. Do you have any view on that?

Mr Jordan—There is no reason why the cable roll-out should be stopped; in fact, it should be accelerated, in my mind, because it is another communications facility. We advocate that you blend the communications systems that are available to disseminate the applications that the communities and the GPs want. We are not necessarily talking about low earth orbiting satellites because they are not a mature technology that is up there and usable at the moment.

What has transpired technically in communications with satellites over a period of time is that because of compression algorithms, which allow you to put more over less, and because there are a great many satellites up there anyway—some of the military orientated satellites have been, I suppose, demilitarised to some extent—there is a great deal of satellite bandwidth up there. Because of the demilitarisation of technology, a lot of the techniques have now become commercially viable. Organisations such as Wal-Mart in the United States use a totally satellite oriented network, but it is not LEO; it is using existing satellite capacity that is already there. LEOs really aren't a consideration to us. Our considerations are to use things that are there right now, that are mature and supportable within this country and within this state.

Mrs ELIZABETH GRACE—This would be the mix and match approach that you were talking about then: making use of what is already there?

Dr Marshall—As long as it is the cheapest option; whatever is the cheapest option to use at the time. And that would probably be used more locally. You would just go to the nearest point of presence of the system and then it will go in on the link. So it ends up

being cheaper for the user.

Mr Jordan—By mixing and matching technologies you can provide very well costed and cost-efficient communications infrastructures to where there are none or where there are very expensive ones. But it is also the reliability factor: reliability is really paramount if you are dealing with a medical service. You want a very high up time. One of the things that people do not realise—let us just take ISDN as an example—is that each link has a particular percentage of up time, say 98.8 per cent. For each one of those links, that is 1.2 per cent left over. If you have 10 links that is 10 times 1.2 per cent that the reliability is not there. By using a satellite mesh network, if we use 98.8 per cent again, it is 98.8 per cent across the whole network all the time, so you have a reliability as well as a cost factor. The reliability factor, where you have a mix of communications structures employed, say the DRCS type communications from Telstra, is an extremely important factor to us.

Mrs ELSON—Dr Marshall, the committee has inspected a number of major telemedicine projects: in Adelaide the committee was shown a demonstration of the renal dialysis trial; in Brisbane the committee inspected TARDIS, which is an intensive care project; in Melbourne the committee observed the Melbourne metropolitan and country hospital network pilot; and in Sydney the committee saw telemedicine being practised at the New Children's Hospital in Westmead. Could you inform the committee about any pilot trials in telehealth in which you have been involved in Australia or overseas?

Dr Marshall—We already have a telepsychiatry network. I would like to turn it back a little first. I would like to comment about the other states.

CHAIRMAN—Just before you do, the evidence that we have had seems to be a lot of excellent work right across the nation and internationally has been done concerning telemedicine but we seem to be operating as islands.

Dr Marshall—Yes, that is what I want to say.

CHAIRMAN—Your good work does not seem to be shared; their good work does not seem to be shared with you. We appear to be reinventing the wheel over and over.

Dr Marshall—No, we are not. We are sharing this work because I am involved in the National Telehealth Committee. Queensland has just been over to see us. They have been over twice because they see their work, the work they are doing up in the north with the GPs and the other work, is going to come to a full stop. They have actually run out of bandwidth up in the north. They are stuck in a 128K system and they need to move on. It has got to be changed. They have got people saying, 'We need a two-meg link to send cardiac ultrasounds and that's the minimum standard we require.' The system that we are talking about is what they can see they need to start working on and that is where they

need to move forward to.

New South Wales is doing those pilot projects. They have not looked at any way yet of how they are going to sustain that after they finish their evaluation. The Victorian things are all over the place, the way I see it. I think Victoria is actually pretty good; it has got very good telecommunications. We are working with South Australia. We are going to put out a business case tender—WA, South Australia and the Northern Territory—to do the business case for aggregating the three states' needs. I have been talking about aggregating in communities, aggregating for the state, but now we are talking about aggregating for three states.

Tasmania has indicated their interest to us to join in once we get that all sorted out and Queensland is already saying that they want to do that. So although we have not done pilot things the actual thing that we have has been analysed and looked at. The Defence Force has looked at it with all their kind of expertise and everything. No-one can find anything wrong with it. It seems to be what everyone is needing to do, to take what they are doing on further.

In terms of applications I would like to talk about what they are doing in these other states. Although they are doing very good work, what I really want to do with the equipment is to make it multipurpose and multidisciplinary. I do not want the equipment just to be used for one thing because what you see is duplication. Let us look at the South Australian situation: South Australia started a link-up with Darwin, so one group put in some video conferencing equipment in Darwin to do oncology. Then Flinders University comes along. In the same room in Darwin they put in another video conferencing unit to do some training of medical students. Absolutely ludicrous! It needs to be all multipurpose, multidisciplinary. Share the equipment out to where it needs to be and use it for whatever. Have it running 24 hours a day. Do not think, 'This is mine. I've got to hold on to this.'

You have to start talking to your users, which has not been done in the other states. The evaluation that I believe is going to come out of the Victorian telehealth projects is going to be like, 'This is being imposed on me,' and those sorts of things. Okay, there are some enthusiastic people—but, 'Why can't we get the tele-interpreting thing to work?' Because they did not involve the people in the process from the beginning. I believe that is the way it needs to go. You need to involve the users of it—the clients and the health providers that are there—and get them to think, 'What are my needs?' I think the overseas experience from the United States is that, if you do not do that, you do not get it right. It may sustain for a while but it does not keep on going, and I think it is really important.

CHAIRMAN—So it has got to be driven by the clinicians?

Dr Marshall—No, it is more than that. Yes, it has to be clinically driven.

CHAIRMAN—Exactly.

Dr Marshall—Not necessarily driven by the clinicians. It has to be driven on clinical need and the users are both the people and the health providers who are there. It is really important that that happens.

Mrs ELIZABETH GRACE—Talking to various people that have an interest in this most recently in Queensland—and we probably have similar problems to you people—

CHAIRMAN—Dr Marshall is from Queensland.

Dr Marshall—That is right.

Mrs ELIZABETH GRACE—The interest seems to be—what you are saying—that if we are going to put it into remote areas or into small country towns, let us make it accessible to the education department and to the justice department—those sorts of people as well. Put it somewhere where it can be easily accessed and put on-line. Cost wise: I know we are talking dollars all the time and that the more you use the more economical it becomes per hour and things like that, but is it a viable proposition to have the thing on-line, as you say, basically 24 hours a day so that people have access to it? I know medical records still are sent down-line.

Dr Marshall—If you have a satellite system it does not matter whether you use it once a year for one hour or for 24 hours a day. The cost to you is exactly the same and it is not very expensive.

Mrs ELIZABETH GRACE—Therefore it is better to use it and give the little town or the little community access to facilities that they would not normally get.

Dr Marshall—Yes, that they would not normally do. In Queensland they have a telecentre thing but it is different to the one that we have. I think that there are a whole lot of lessons and a whole lot of infrastructure that would need to change to get the same model to work but it is possible to do it. It is really not a problem.

Mrs ELIZABETH GRACE—Do you think it is feasible to get a national model?

Dr Marshall—As I said, we have got South Australia with all their applications. We have got the head of the Health Commission there asking us to tell them what to do. That is where it is coming from. We have got the Northern Territory really interested in the whole thing. This system can be used for export too because the same satellite footprints are the same ones for Asia. There would be no more expense in having your link-ups through to there. It is not going to make any difference. You can actually connect up. The network that we have designed will be open to private and public, so we are not

saying, 'Okay, you're Silver Chain or you're a GP, you can't be in it.'We have looked at the security access side. So this is just a common thing. It is something that can be used by whoever with all those sorts of security and privacy things put into it.

The thing that gets the GPs, for instance, in the country really interested is that—they might have a practice in one town and one a couple of hours away or it might be a group thing or something like that—to communicate all they have to do is to go from their surgery into the point of presence of the satellite link, maybe a local phone call or even a microwave link or something like that, once you have the microwave on its feet or a landline or whatever. So it is a local call between their practices. So there are all those sorts of costings that just facilitate the whole thing.

What we are doing with this evaluation, if I get the money to actually do this whole area thing, is that we are actually looking at everyone's phone bills over the last year, seeing what the GPs' phone bills are, the school one, the things of every different player in those towns, so we can say, 'Okay, here's our up-front.' That community will not have to pay for that. It is a state thing and it is not very expensive. So just the savings and those sorts of things will be quite phenomenal, I would have thought, just for individuals everywhere. You have got a whole lot of things like that that are really quite major.

Mr Jordan—In fact, it is a good cost case for actually owning your own transponder for a satellite for some of these purposes. Can I just take the opportunity of revisiting pilots for a few microseconds. In regard to pilots, we have a philosophy that pilots are usually doomed to failure because they are put in with seed capital of some type which runs out and they fall apart and leave a bad taste in the people's mouths.

CHAIRMAN—You had one in Western Australia that was a disaster.

Mr Jordan—A pilot?

CHAIRMAN—Yes.

Mr Jordan—Not that we are aware of.

CHAIRMAN—I might have the wrong state.

Mr Jordan—Telemedicine, which tends to be discipline specific—we use the term 'telehealth' because it embraces all the health needs—has got a great history of disastrous pilots, but we prefer to build networks and expand them and do things as they go. If I look at the pilot scenario where people put things in to trial, the two things that we have going for us which are unique in this state, if you look at it from the point of view of a pilot context and the things that were started and built and developed on an ongoing basis, are first our virtual private network which gives us quite reasonable bandwidth

connections by both Telstra and microwaves and other innovative communications blendings around all our teaching hospitals and the metropolitan hospitals and a whole stack of others.

So we already have a very large information flow basis amongst our hospitals and community and we can extend those tails by using satellites or meteor burst coms or RF modems and microwaves and all those things and blending things together. But the thing that really helps us, which is unique in Australia and which you may not be aware of, is that we have a little electronic device called UMRN—unique medical records number—which fits into the patient master index. It is unique to Western Australia and arose from the health department here with a requirement to tie people with records and, in the days of the old mainframe systems, with memory chunks so that you could do things on a very well-controlled basis.

From the pilot scenario those things have not been done or built. We did not call them a pilot; we just built them because there was a need to do it. It puts us in a unique position by having already the basis of an information network which is transparent, because it is a virtual private network, and a means of controlling the people with the information which causes things to be much better or more efficiently delivered from the point of view of boundaries. So I would just like to put that in the scenario of pilots, because other people are talking about doing that, whereas we already have it, and have built it.

Mrs ELSON—Dr Marshall, the submission observes that ethical, privacy and legal issues are immensely important. Are you able to elaborate on how these issues could be affected by the use of telemedicine?

Dr Marshall—I actually wrote a paper about these things just yesterday from two points of view, which I will give you if you want to.

CHAIRMAN—Could you provide that to the committee secretariat afterwards?

Dr Marshall—Yes, certainly. I am actually chairing for the National Telehealth Committee a standards working group. Being a clinician, I thought that there were all these technical people out there, and basically I still really think this clinically driven thing is the overriding thing on some of these things. The technical standards in terms of managing data—all the file security and all those sorts of things—we are really up to speed with. We are actually commissioning work to be done, giving people what is needed to be done, to get that facilitated in terms of electronic storage and transmission.

I have also been looking at standards in terms of protocols on privacy for telehealth, and I was just looking through some of the tasks that needed to be done for that—guidelines, getting people to know what their responsibilities are and how it is a bit different for telehealth from just normal consultations and things like that. So I am really

happy to share that with you at the stage that it is at at the moment. But the privacy issue is really important.

CHAIRMAN—Can you just give us some idea of how the West Australian government would like to see the medical benefits schedule altered to promote the use of telemedicine? Doctors are clearly not going to use telemedicine as widely as we would all like if they are not going to get paid for it.

Dr Marshall—They cannot use it, basically. It is really important that something happens. We are budgeting at the moment to actually pay out of just my state telehealth funds for people to actually use the system, because we cannot see any other way around it, but we want to do that as a modelling.

CHAIRMAN—If Dr Wooldridge was sitting here at the head table and you were going to give him some advice—

Dr Marshall—I would tell him that he had to decide that he needs to do a fee for service, that he should be able to do a fee for service, for people who are entitled say that they are using telehealth. My indications are that that is not a possibility. Grants or whatever way, but certainly some form of reimbursement needs to be considered. If not, we just cannot do it in this country, basically.

CHAIRMAN—Given the fact that borders in Australia are reasonably arbitrary in some respects, and given the fact that we have needs across borders, and clearly telemedicine will be operating across borders, what approach would the West Australian government have to maybe national registration of practitioners? I suppose the other thing you might also comment on is your reference to the export possibilities of telemedicine or telehealth. In an international situation, clearly you have doctors here operating and dealing with doctors abroad. How do you see liability issues impacting?

Dr Marshall—There are two things there. What the health department might say is that, yes, there should be a national registration instead of having to be registered in every state, which seems like, firstly, an expensive and a cumbersome thing to happen, and it is going to just leave things open to be liability claims.

CHAIRMAN—So the West Australian government would support national registration?

Dr Marshall—We would support that, but our medical board, I can tell you, will not. There is a real barrier to doing it.

CHAIRMAN—Is the medical board not appointed by the government?

Dr Marshall—Yes, it is part of the government, but they have got their own

particular ways. It is a pretty staid old Medical Board.

CHAIRMAN—Tell them who is boss.

Dr Marshall—Yes.

CHAIRMAN—Anyway, I understand what you are saying.

Dr Marshall—There are logistic problems to actually getting some of those things to happen. It is a really big problem. I have been to the medical board and I have said, 'Look, you've just got to watch out, you'll have people here wanting to consult with someone at the New Children's Hospital in Sydney. That will be what will happen tomorrow. They could do it now.' They look at me as if I have come down from Mars and say, 'Oh, our specialists won't let that happen.' So there are actually quite a lot of logistical problems which really need addressing.

CHAIRMAN—How should it be addressed?

Dr Marshall—I am really happy for it to be addressed from this National Telehealth Committee working group that has started—they are actually having their first meeting today—because I think that all those issues have been or could be identified on the format of what they are going to do, and some solutions could be recommended from that.

CHAIRMAN—Alright, thank you.

Mrs ELIZABETH GRACE—My last question was going to be on that same point, but we have covered it.

Mrs ELSON—I think I am questioned out too. I think we have covered everything.

Dr Marshall—I have one more question, because you said you were going to the Tanami on a view. When you go to actually observe it, it is my understanding that very little has happened. The Tanami network actually presents an opportunity for you to see why I believe things need to be done a little bit differently from what has happened. It is all very well that they have got this network going and all sorts of things, but the actual use of it for health has been really minimal—in fact hardly at all.

CHAIRMAN—Why?

Dr Marshall—Adelaide, for instance, said, 'Oh, we'll offer you these specialist services to look in ears and do all these sorts of things,' quite recently, and they blocked it, because here is a hospital saying, 'We're going to do this for you'—you know, that sort

of story. So it is not actually going to happen.

CHAIRMAN—Who blocked it?

Dr Marshall—It was blocked at two levels: by the community, but also by the Northern Territory Health Service people there too. They said, 'We may not want to do that,' and that is a little bit of the change management that is needed.

CHAIRMAN—And yet it was wrong to block it in your view?

Dr Marshall—No. Well, I do not know, because I do not believe that it is the place of the hospital to be starting to initiate that. They could go out and talk to them. I really believe that the communication needs to come from the community. I have been trying to get people to say, 'Okay, we'll work out our health needs,' and I have got a couple of communities now who are saying, 'Would you please come and let's help facilitate that.' I have been waiting for that to happen, for all those reasons why Tanami have not used it for health and why these things block. You get that and then you look at the local providers, and you work within that—where are the referral groups—and then you get those providers, and you get them to actually own the whole thing, and it therefore becomes something that will be used.

The thing with the Tanami thing is that they do not use it for health or they have had a few links and they do occasional things, but it is not something that is on their agenda, and it is something that has gone in. And, once you have actually got something in, it is actually hard to initiate change because people get used to, 'Okay, we're using this system for communication,' which is the Tanami thing. Or in South Australia we are using it for psychiatry only. that is why, when anyone is communicating with me, I am saying, 'Hey, let's work out what are all your needs, let's look at it on the big picture first so that we can get it right.' That is the experience that has happened in the States. The biggest lesson that I have learnt from the things I have seen there is that, unless you actually get that change management and that commitment and that needs analysis at the local level by both the community and the local health providers, it just does not come off.

CHAIRMAN—So are you saying that this facility is available to the Tanami people?

Dr Marshall—It is not there for health. It is not a telehealth facility.

CHAIR—But basically medical assistance is there and the community has chosen not to access it?

Dr Marshall—I think it was blocked. I do not know whether it has finally gone through to the stage where it is not going to happen, but it is at that stage I believe at the moment where—

CHAIRMAN—We are going there, so it would be an interesting question to ask.

Dr Marshall—That was back in early March, because I have been waiting for this little link to happen, and when we followed it all up that—

CHAIRMAN—We actually saw a link from the Queen Elizabeth Hospital end and we were looking forward to seeing it from the other end. To what extent would you say—

Dr Marshall—It is the Queen Elizabeth thing that is being blocked. It is a little bit of this imposing thing. If you want these things to be used, you have to work at it at the local level. I do not know what Tanami is going to say, but it is doing it the wrong way around to actually initiate these things that way. Anyway, you go and see what is happening now, but that was my understanding of that.

Mrs ELIZABETH GRACE—That was the message I got from talking to the practitioners and clinicians in Queensland. They were saying the same thing. If it is not community initiated, they just said, 'We're wasting our time.' They have to be prepared to do the training, they have to be prepared to take it on board, and you have just basically said the same thing. I did not ask for that. That came out in just general conversation.

CHAIRMAN—Mrs Grace has been to the Maryborough Hospital as well since we last met. So she saw the other end of the link.

Dr Marshall—And that is what the evaluation in Victoria is going to say too.

CHAIRMAN—I am going to go to Nambour soon. You mentioned the G7 emergency telehealth proposal aimed specifically at rural and regional and remote areas in the western two-thirds of Australia and contiguous areas. Could you elaborate on the G7 proposal and whether you were able to gain the funding you sought through your G7 submission.

Dr Marshall—My understanding is that as of December the G7 funding did not come through for any of the Australian projects. It was just very American, and research, and now they have turned to evaluation as their thing. The European Union project, which is where we had a partnership, that went into the G7 did not get accepted. The communication I had with Sandra Perost yesterday was that they have now requested us to send some more information for a telecommunications and telehealth thing, and this is a European Union thing.

I worked in London for four years and I did a lot of European Union submission work then, and I actually have a few complaints. It is really difficult for Australia to actually do these things; it is a really hard thing. I am not saying there is anything about our sort of thing or anything. I just feel it is a really hard thing to do. I also really feel that basically we were not very well presented. I do not at all believe that federal Health actually understood what we were on about. I know that Sandra Perost does not

understand and has not actually represented us properly. It does not really matter very much, but we have actually had people coming from Europe. For instance, just recently there was a chap who is the president of the technology parks who reviewed what we were doing, had a look at all the things, and said, 'I can help you with any European Union submission that you want to do because what you're doing is really terrific.'

That is the sort of information we got from an Expo at Hanover just recently. It just does not feel as if things are facilitated properly. But, having worked with the European Union money, it is actually really hard to work it, and you may just get it for a year and then it all drops out anyway. We put in a submission, and basically it was really great for us. We have still got the tristate thing going, we have still got our relationship with the Australian Defence Force, and we are still working as if we were still doing all of that, but you might get a few marbles one year and then you will not get it. Basically, that is my four years experience from the whole thing before.

CHAIRMAN—What would you like to see the federal government do to move telehealth, telemedicine along?

Dr Marshall—I would like the federal government to actually help with this common telecommunications infrastructure. It feels really funny to me that I am budgeting for the common telecommunications out of my health department budget for all these communities. It does not seem right. It feels to me like it is a federal thing. We have got this universal service agreement sort of thing. It actually would not cost all that much. I know there is a little bit of RTIF funding, but it is not quite enough to do what is needed, and I would actually really like the infrastructure to be put in place. Then I think it is the states that should be responsible for the network that actually goes from that.

I would actually really like the model that we have to be seriously looked at as a model for Australia because I really think it makes sense. There are certainly so many people who look at it who cannot fault it, and I really think it would be an economical and working solution to any of the problems that we have.

CHAIRMAN—Is there anything else you would like to tell us?

Dr Marshall—I do not know yet. I have a couple of things. We had an expo which I was going to leave you some information on. We made a 12-minute video out of it. We had this in February. Why we did this was that we had all these people coming and saying, 'This equipment works,' and all these sorts of things, but what I said to Jumbo was, 'We need to put all this together and make sure that what we're saying actually does all work.' Our philosophy is that it is easy to use and it works. So we did that. We connected up our Health Intranet and we put up a satellite dish—we had all sorts of things—and we had all the equipment there which demonstrated that it actually will work, even though it was just actually in the two rooms in the health department. It actually was going out and in, it was making proper communications, and it actually showed all these

things.

It was not just doing one thing. It was not just doing X-rays. You could use it for absolutely everything you wanted in a multidisciplinary sense. You could get your records to your GPs, the GPs could see the X-rays, images could be at the point of presence where they needed to be, and the people could communicate back by video conferencing on what was going on, or whatever was needed. I will leave this, if you want it. I am happy to leave the video. It is only 12 minutes long.

This was taken to a show recently in Hanover, and the comment from people all over Europe apparently was, ‘This is the first time anyone’s put all this stuff together. How did you get it to work?’ Our response is, basically we are using all stable technologies, we are not doing developmental stuff—these things have been around—but we have worked to make it work. We want to provide the modalities that meet the full needs and the requirements, and it was a test of the system, basically. We know it works. We have the complete costings. We could implement the thing tomorrow, no worries.

CHAIRMAN—You mentioned Sandra Perost, I think, and how you had some concerns. I suppose that is an understatement. How should we be represented as a country? If you were not happy with the way that matter was handled, who should be the appropriate channel to represent Australia in these fora?

Dr Marshall—The reason I was not really impressed with Sandra is that basically she is a private consultant. The last time she was going over to represent us at the European Union was to find out what sort of things were available, and she did not come back to us, and when I spoke to her a couple of days ago the comment was, ‘Well, you’ve missed the date now, the submission’s gone in,’ but she never feeds back. I know that she was employed because she speaks French, and she said to me, ‘I didn’t go to represent you anyway, I went there because I was doing my own private business, but I just said for the federal Health that I’d go and do these things,’ and so we get—

CHAIRMAN—So who appointed her—the federal health department?

Dr Marshall—Yes, through federal Health.

CHAIRMAN—Who should be there representing us?

Dr Marshall—Some really smart person.

Mr Jordan—Somebody who knows what they are talking about, for starters.

Dr Marshall—Somebody who really knows what they are talking about.

CHAIRMAN—Like Dr Marshall?

Mr Jordan—Yes, in my opinion.

Dr Marshall—Somebody who really knows what they are talking about who can answer the questions.

CHAIRMAN—We are going to be talking to this lady, as a committee. We will obviously be able to ask her some questions. It does seem a matter of real concern if our case wasn't put forward by someone who said she wasn't really there representing us anyway, but she will just put this point forward while she was there looking after her own business. That doesn't really seem to be the way we, as a nation, should deal with the issue.

Dr Marshall—And she doesn't follow up. The other chap, Alan Whitfield—I don't know whether they can't grasp the whole concept or something. We went over there to explain it initially. They even presented it with the wrong title. We actually had a video conference with some people in Europe and they said, 'What you're doing is wonderful. Yes, we'll put you on the thing,' but we have been told we cannot communicate directly because it has to go through Canberra.

CHAIRMAN—Who has told you you cannot communicate directly?

Dr Marshall—We have been told by the federal health that it basically is a ministry to ministry thing, all of these European Union things, and that therefore it has to be handled by the Australian government.

CHAIRMAN—It might technically be the case, but I would have thought the Western Australian government—

Dr Marshall—We have written to federal health and told them, and we have gone over there to say that we are not happy with the representation.

CHAIRMAN—What sort of response have you had back?

Dr Marshall—No response.

CHAIRMAN—No response at all?

Dr Marshall—Not really, no.

CHAIRMAN—Have they come back to you with an inadequate response or have they just ignored you?

Dr Marshall—They have not responded, let us say, to the letters or whatever.

CHAIRMAN—I think we should contact the department. The federal department is coming back before us. We shall certainly ask them the question as to why they insist on going down this road and why have they not responded. In fact, we might even drop them a line beforehand and specifically ask for a response. Thank you very much.

Dr Marshall—I do not want it to sound like sour grapes or anything because it is really not.

CHAIRMAN—No, you have not come across in that way. You have come across really as being an honest broker, and your evidence has been a breath of fresh air for us. We greatly appreciate both of you appearing before us. Before you depart, you might want to see Hansard, just in case Hansard wants to check a couple of facts. Feel free to partake of morning tea, and if you would like to stay here for the next hour and a bit while we are here, you will be very welcome also. I have asked you to let us have some additional information. I would appreciate it if you could pass that on to the secretary, not necessarily today, but in the next week or so. We would be indebted were you to do that. Thank you very much.

Dr Marshall—I will leave you with this little bundle, if that is all right.

CHAIRMAN—Thank you.

[10.10 a.m.]

CHAIRMAN—I ask the secretariat to invite the witnesses to swear an oath or make an affirmation.

JAYASURIYA, Dr Pradeep Harshan, Director, Perth, South Eastern Division of General Practice Ltd, 7/300 Albany Highway, Victoria Park, Western Australia 6100

LIE, Dr James Tjhouw Njin, Director, Great Southern Division of General Practice Ltd, Care of Albany Regional Hospital, Hardie Road, Albany, Western Australia 6330

CHAIRMAN—We have received the submission. I was wondering whether each of you might like to give us a brief opening statement.

Dr Jayasuriya—We are grateful for the opportunity to address this committee. Since that submission was written many developments have occurred, and there have been a few changes, and we have got a document which addresses some of those changes.

CHAIRMAN—Present that to us, and we will receive that. Maybe in your opening statements, concentrate just on the changes.

Dr Jayasuriya—Yes. The major change that has occurred is that health care is changing at a very rapid rate for the primary health sector, and for GPs there have been some significant changes. Firstly, there is the move towards evidence based medicine, there is the move towards coordinated care, there is the move towards a general multidisciplinary approach to the management of health care at a primary level; and in all of this, information management is something that is critical in those changes that are occurring.

To that end, we applaud the changes that are happening in information management, but our concerns are that those changes need to be managed and they need to be coordinated and integrated so that the changes can be managed effectively. The divisions of general practice are now three to four years old and offer perhaps an ideal vehicle to implement some of these changes. But a major thrust of our submission is that there has to be an integrated scheme and, moreover, the implementation of whatever strategy is proposed needs to be coordinated and monitored and evaluated at a central level.

CHAIRMAN—Thank you. Dr Lie?

Dr Lie—Yes. I would like to take leave to table a few documents here which I thought the members would be interested in reading later. The last document listed is actually probably the most interesting one. However, as Dr Jayasuriya has said, many changes have happened since we submitted our wording. A few points would be: we commented about advisory bodies being required, and it is true that now the Department

of Health and Family Services has established two committees called the Information Management Strategy Group and the Divisional Information Management Subcommittee, of which I am a member.These are to act as expert bodies. However, their recommendations are very slow to actually be carried out, to be applied to the coalface. So we do suggest that we need the establishment of an agency comprising major stakeholders—and this could be anybody you can think of that is interested in health information management—to oversee development and implementation of all the health information management.

Then there was the other issue of facilitating the use of, I suppose, IT with general practitioners. For the last two years now, the Department of Health and Family Services in the GP branch has held back all applications on information management technology because there was specifically no strategy. I would agree with them for holding back, but now that a strategy has been formulated, we are just going to start opening it up again, and it is good. However, there is a sort of rider—I suppose it is like a barrier to all this being carried out—that a lot of applications are excellent, but it is going to be limited by the amount of funding that is available because it is all going to come from the division's projects pool of funds that the government has already allocated. So we suggest that separate funds probably should be set aside to specifically address information technology issues that, I suppose, some actual body believes is of national significance.

CHAIRMAN—Costing how much?

Dr Lie—That depends on how much the projects come down to, and it can range, if nobody submits work, from nothing to, I suppose, quite a few million dollars to carry out those sort of tasks.

Dr Jayasuriya—The division's program currently is $72 million, which is expended almost entirely. I guess for information management you would be looking at probably a third to a quarter of that for some of the projects that are being proposed nationally.

Dr Lie—That is right, because otherwise if people have very good information technology type projects there is a cut into those sort of funds which at the moment are being carried out for service delivery type projects on the ground, like for diabetes services, for some of the allied health services, for cardiovascular type projects. So I suppose it is a way of balancing, isn't it? Which one do we need more? I do not doubt that we need all those other ones that have already been expended, but it is another issue where we need to pursue information technology type projects. I do not agree that it should be funded for all small tin-pot type projects. I think they should be ones that will really have an impact on the whole nation, not just on one sector of the nation.

CHAIRMAN—Doctor, you are the Director of the Division of General Practice. Is that a full-time position?

Dr Jayasuriya—No, it is not. It is part time.

CHAIRMAN—You still run your own practice?

Dr Jayasuriya—I am a full-time GP still, yes.

CHAIRMAN—And you too, Doctor?

Dr Lie—Same thing, yes. Directorships of most divisions are all part time, and there may be only one or two full-time executives or directors.

CHAIRMAN—I think we have met them. I am interested in the use of technology in medical practices, and there seems to be something of a cargo cult mentality amongst some general practitioners, suggesting that perhaps the government is going to give each general practice a computer system as a means of encouraging them to computerise. I think that is unlikely; in fact, I think it is very unlikely. But we obviously need to do something to encourage computerisation. A lot of practices might use computerisation in an administrative sense, maybe 60 per cent, but fewer than 15 per cent would use computers for clinical purposes in the surgery. What should the government do to encourage practices to use computers more in a clinical setting?

Dr Jayasuriya—I think the provision of hardware on its own is a ludicrous proposition, and I think if the government was entertaining that, that would be something that we would not support.

CHAIRMAN—It is not, I suspect.

Dr Jayasuriya—I think the acquisition of computers and information management for GPs should be a commercial decision, and they should see that it is of benefit to them and their patients. To that end, I think the government should support them in those measures, and that means provision of education, provision of training, provision of infrastructure support to help them with the resources that are necessary for them to acquire those information systems.

CHAIRMAN—I agree with your statement in principle. They should be interested, but clearly 85 or 86 per cent are not. What needs to be done?

Dr Lie—I think we have quite a few issues here. You need to have multiple approaches. One is the funding issue. You need some sort of incentives for GPs to want to be, I suppose, more information technology orientated. One is, for example, billing. At the moment, whether or not you people go to doctors very often, you pay the bills, but you take an account, and then you have to go and submit it to a Medicare office to get your money back or a cheque, which then you have to take back to the general practitioner again. Those cheques might take anything from six to 10 weeks, despite what is claimed by HIC. But the reality is it takes such a long time between the time of consultation and the time of payment. So simple measures like the EFTPOS system are available, and I

understand that HIC is very interested in that sense. Perhaps the committee already has the information on how much savings they will have; I gather it runs into multiples of millions of dollars of savings in costs. If HIC, which is the government, can save money, then some of that saving probably should be repaid back to the providers, which is the health service providers.

CHAIRMAN—I think that is a very reasonable prospect.

Dr Lie—I gather there are blocks, though, in terms of why those ideas are not taken up—presumably philosophical, political blocks. That is fine also, but we need to address those sort of issues. If I as a GP elect to do a paper based method of billing, that is fine. It is up to me. I will have to wait 10 weeks. But if I elect to be more electronically orientated and I use the EFTPOS system, I should get money today. That is a financial incentive for me as a GP.

CHAIRMAN—I would just like to comment on that. I said 'prospect'. I meant 'proposition' before. It seems to me that what would be logical—and I would be interested in your comment—would be if the government were to permit bulk-billing electronically of the Medicare rebate proportion of a medical bill, and then the doctor would collect any balance from the patient. If a bill is, say, $35 and the Medicare rebate proportion is, say, $21, the doctor could bulk-bill the $21 and collect the $15, and because there was a computer generated claim as opposed to a paper based claim, which costs a lot less for the HIC to process, maybe the doctor could be rewarded by, as you suggested, a quicker payment.Technically, the HIC tells us that there could be an instantaneous payment, but apparently there has been a political decision over the years to make doctors wait—we were told 14 days, weren't we?

Dr Lie—Ten days.

CHAIRMAN—Ten days, and it blew out, I think, to 14 days, but now we are told that it is in practice very much longer than that. Do you think that would be a carrot which would induce a lot more practitioners to put in one—

Dr Lie—Yes. Can I jump across and give you a hug for that statement! That would be supported. I would say you have no detractors from that.

CHAIRMAN—We understand that it costs about $1.80 to process a paper based claim.

Dr Lie—That is right.

CHAIRMAN—But thirty-something cents to process an electronic claim. It just seems to me to be an incredible lack of logic which insists on encouraging people to deal with the Health Insurance Commission in the most inefficient way.

Dr Lie—That is right. I think if you want to extend that innovation further, I presume some sectors of the medical profession will say, 'Why don't we plough the savings that HIC generate from that back into the medical benefits schedule?' We can argue that either way, but I can see a more altruistic way of accessing those funds from the savings would be then to plough it back into infrastructure. As Jann Marshall was talking about, we need the networks, we need a telecommunications network, something where we as individuals or even as divisions have no impact at all, but you as the federal government have immense impact, where you can just direct or legislate or mandate something and say, 'Look, this has to be done,' and it is done, so to speak.

CHAIRMAN—That would help obviously computerise some aspects of medical practice, and of course that proposal I outlined would obviously be efficient and something that is very worth considering, but it would not encourage practitioners to use computers in clinical settings.

Dr Lie—No, that is right.

CHAIRMAN—So what should the government do to move that area along?

Dr Jayasuriya—I guess to do that you have to devise a system of a standard record keeping format, and a standardised patient medical record system would be, I think, integral or central to that plan.

CHAIRMAN—Who is going to develop it?

Dr Jayasuriya—I think that should be done at a national and central level, and that would need involvement of the stakeholders. GPs and consumers would need input into that, because I think once you are talking about a centralised patient record, you are talking about expanding the information base that is available, and it is going to be accessed by more than just the clinicians. The potential for that to be accessed by researchers and governments, for whatever reason, is there. I think if you are setting up that sort of system it needs to be thought out very carefully, and you need to determine the boundaries of who accesses what, and what information goes into that system.

In addition, you also need to educate the GPs. A lot of GPs are not familiar with computers, and it is very important that a structured education and training program is undertaken as well.

CHAIRMAN—Do you think this is a generational problem? A lot of older general practitioners are not wildly excited about computers. In fact, they are computer phobic, but with some of the new courses being introduced, such as that recently implemented by the University of Sydney, perhaps there is going to be a generational improvement. As new doctors come through, they will be more computer literate. But can we afford to wait?

Dr Lie—No, we cannot, but we still have to plod on though. Can I say two comments? One is that there have been initiatives. You may or may not be aware of the IBM consultancy at the moment for the so-called ideal medical desktop. That is going on right at the moment, and actually the people are coming to Perth to consult the GPs on 21 May. But then, again, you either have to travel to get there—so a lot of rural Gps would not be able to get there, unless funded (I am actually able to be funded by my division to attend that meeting and to give my perspective of it)—but also GPs can access the Web site to give their comments to the consultants. But then if we say only 50 per cent are computerised and probably fewer have an Internet address or Internet access, how many GPs will actually be giving their views?

The way the consultancy was formed was that they do not pay GPs for their time to give comments. One can argue about the pros and cons of that, but what it means is that general practitioners, being busy, have to take time off from the surgery and because they are self-employed, when they take time off, they are not paid for it and so they lose income. The consultants are highly paid, but then we do not pay the people we are trying to get answers from. It is a difficult issue, I realise. I personally do not know how to solve that. But those are the issues, I suppose: you can just feel how the grassroots are feeling about this, and they are very irate. So all they are going to do is have people who are supposed to be computer literate giving the comments about what is needed, but not for the general user. That is one thing.

Dr Jayasuriya—I do not think this problem is actually confined to GPs.

Dr Lie—It is also the specialists.

Dr Jayasuriya—I think it also goes across other sectors. I think an example would be in the university sector where they implemented various computer systems, and many of the academics were in a similar position to the GPs. I think the way the universities tackled it is perhaps a model worth considering in that they earmarked funds for the universities to employ officers in information technology and management who acted as resource people for those academics when they had problems. That gave them the security that, if there was a problem, they had someone to turn to who was local and easily available. I think some structure along those lines is what you would need to encourage the older GPs to get involved in computers.

Dr Lie—It is a bit unfair to keep slating the federal health department, because, being on the DIMS Committee, I am also privy to the fact that we are wanting to encourage projects from divisions in terms of education for GPs and for information management—not just technology but general information management. But then, like I said before, all this had to come from the pool fund, the general division project budget, which means people who are going to approve applications, or the division itself, will have to say, 'Is this more important than cardiovascular health?' which means they have to start prioritising. When you start doing that, some GPs, especially if the board is not

interested in information management in terms of the technology side of things, will say, 'Well, that's not a priority.' Hopefully, they will have other incentives that way in terms of the way the funding may change. Where we have accounts based funding, then that will force doctors to change because that means you are not going to get funding unless you can reach a certain target.

I think that is a sort of disincentive in a way, is it not, rather than an incentive, and I think that is probably one of the drivers that will force doctors to change, because after a while the funding structure will be such that, if we are not able to give our division the information that is required so we can then make an evaluation of the impact of what we are doing, there is going to be no funding. So that will be one type of driver.

Another one, I suppose, is that the GPs, the end users, need to feel that, if they are using computers, it is actually going to benefit them or the patients. I think we also need the patient side drivers. In other words, consumer empowerment is very important, so we need to have structures put forward.On the plane down I was speaking to a librarian from Albany. She said, 'It is so difficult for the public to access paper based health information. There are queues lining up every day asking for information.' Shouldn't we then supply access to health information—structured health information—that is simple to understand and access for the public, because then the public will force the providers, the doctors. They will say, 'I want this. I want that.' So you have another driver from the users side of things to force the GPs to start being more modernised.

Mrs ELSON—It has been put to the committee that multistate registration of GPs is necessary in the event of cross-border consultation and telecommunications and technology. What views do you have on that question of multistate registration of GPs?

Dr Lie—I think it is ludicrous that a country like Australia does not just have one Australian medical board, personally. We were talking about this last night with federal health department people. There is a provision now that if you register in one state I gather you are allowed to be registered in every other state, but you have to pay the fee. That means the paperwork has been cut out, relatively, but you still have to pay for it.

CHAIRMAN—Except the cheque writing.

Dr Lie—I suppose I would fully support the abolition of state medical boards or some sort of structure where you have one central registration. That will cut out all that kerfuffle.

CHAIRMAN—What would be the response of the state medical boards to their proposed abolition?

Dr Lie—I am not privy to their thinking, I am afraid.

CHAIRMAN—I expect we might know what they would say.

Dr Jayasuriya—It is an interesting question. I can assure you that most of our members would not even consider that a question worth answering. I think most GPs would think that a wonderful idea, to have a national registration body.

Mrs ELSON—So is it the state that is stopping this?

Dr Jayasuriya—I think it is a barrier that is perpetuated by a very small minority in the medical profession.

Dr Lie—Including the medical boards.

CHAIRMAN—Maybe we will consider that in the run-up to giving our report.

Mrs ELIZABETH GRACE—I have a couple of questions. There has been a high level of concern from different people that have come before us on the Big Brother aspect of this whole telehealth issue—and you have touched on it slightly—on medical records—access to them and things like that. Do you think that a lot of this stems from a lack of awareness and knowledge about the technology or do you think it is something that we should perhaps have some concerns about—the privacy issue, basically?

Dr Jayasuriya—Absolutely. I think it is an issue that most GPs think about, and I do not think it is confined to a lack of knowledge of the technology. The potential is there, and I do not think you could argue with that. It is important that government think about legislating to actually define what the public interest is. That may be an issue that the committee may need to think about. To legislate and define what that interest is may be useful for the future. I think it is a very difficult issue that needs wide consultation. It does need consideration. To simply say that it is a phobia of technology I think would be a very great oversimplification of the issue.

Mrs ELIZABETH GRACE—It has been stated that in some cases or in some programs it could be even more secure in a technological sense than on the paper records that we now have jammed into filing cabinets in people's offices which can be reasonably easily accessed.

Dr Lie—I think I would agree with that. If you go to most general practitioners' or specialists' offices—even hospital systems—you can easily access the paper based records. The only thing is that it is very difficult to find the records. With computer systems I suppose it is hard to get in but once you get in it is easy to find the records.

There are lots of technological ways to overcome those issues. If I may recount what Dr Marshall was talking about. We had a recent telehealth expo here where the IBM people showed their vision of how a virtual patient record can be obtained. When I have

discussed this with the public in Albany there is overwhelming support. They keep asking me, 'When is this going to happen?'

I will give an example: a patient arrives in a rural town from Perth with a chronic illness but she cannot remember all the investigation which was done—yesterday or the day before—prior to travelling. I could reorder a whole set of investigations again which would cost the public more, or I can access it on the computer through her virtual record and it does not matter whether her doctor, her GP, is in Perth, in Broome or in Sydney. That has enabled a link and I can see the results and therefore I do not need to reorder tests and investigations and I have instant access to information.

Most of the patients I speak to are happy with that. I suppose it is the same as now: when they move practices they say, 'Can I have my records go to the other doctor?' They trust that I am going to be sending that to the specific doctor and that it is not going to land on somebody else's desk. Most patients I think are happy with that. Unlike Dr Jayasuriya I believe that most of the blocks are actually from the medical professionals themselves, not from the public.

There are a few public people, consumers, who are worried about it—people from the Consumer Health Forum have certain gripes and axes to grind—but the majority of everyday people will say, 'This is fantastic. It means I don't really have to remember all the details about myself because it's available, and I don't have to remember all the details of the investigation because it's available. I don't want to have two or three tests on the same thing,' because they understand that costs money. But the blocks I think mainly come from us because of the fear, I suppose, and I think, like you say, the ignorance of what actually can happen.

CHAIRMAN—Thank you very much, Doctor.

Mrs ELSON—It has been put to the committee that GPs are more likely to take up rural or remote appointments if they are able to access information and seek opinions through the medium of telecommunication and technology. Do you have any views on this suggestion?

Dr Lie—Yes, I think that would be a very fair comment, but at the moment that is depending on what sort of telehealth we are talking about. If we are talking about a phone call, yes, because it is instant, it is quick, although finding the specialist might take a long time. However, if you are talking about televideo-conferencing with the sort of communication infrastructure we have, you would be forever. It would be expensive.

For example, again, with the lady I talked about, if I need to consult with a specialist, I would have to say, 'Excuse me, do you mind making an appointment down at the local hospital,' because that is the only place that will be able to afford the $80,000 equipment just for viewing the stuff, right, and we will ring up the hospital first, make an

appointment, go down there, and then ring up the specialist and have a consultation. Nobody is going to use that.

What we need is instant access on our desktop. When you present to me asking for help, if I need an expert opinion about the consultation I am able then to dial up a specialist or somebody somewhere else in a different location and then be able to have instant access to that information. That is what patients want. They do not want to have to come back in three hours, in three days time, to make another time so that we can seek a specialist's opinion. They might as well travel to Perth.

CHAIRMAN—Doctor, thank you very much for that, and thank you both for appearing before the committee.

[1.36 p.m.]

CHAIRMAN—I ask the secretariat to invite the witness to swear an oath or make an affirmation.

ANTHONISZ, Mr Keith Mark, Consultant, Technology and Innovation Management Pty Ltd

CHAIRMAN—Thank you for the submission which we have received and circulated. Would you like to highlight in a brief opening statement some aspects of it to focus our questioning.

Mr Anthonisz—Just as a bit of an introduction to what Technology and Innovation Management is, it is a not-for-profit company owned by the four public universities in Western Australia, and we got involved with telemedicine through a project which Computer Power undertook to look at a network covering the Asia-Pacific as well as Australia. It was more of an export-oriented project, and I was involved on a consulting basis in that project in looking at market surveys in Asia. Computer Power subsequently dropped that project and did not proceed with the investment, but my company has been continuing to have a link into the whole telemedicine area. We have continued to look at the Asia-Pacific and tried to look at means of getting networks happening there, and we have also been involved, in a limited capacity, with the West Australian government in looking at some telemedicine issues there as well.

CHAIRMAN—You say a not-for-profit company, operated by which four universities?

Mr Anthonisz—The University of Western Australia, Curtin University, Murdoch University and Edith Cowan University. So they are the owners and it has got a board—

CHAIRMAN—Is it intended to have a permanent life? Nothing is done these days not for profit. Do you ultimately hope to earn income for the universities?

Mr Anthonisz—The object of the company is not so much to generate profit but to support innovation and commercialisation. So we are involved in, for example, licensing products and inventions from government universities or small companies or individuals to larger players, and we basically get involved in the legal agreements for that, and we take a share of the royalty income that comes back. We are also involved in some start-up companies. The company was originally established in 1985 and it was established to fill a need for supporting innovation at the very early stages, and we worked on it as a not-for-profit company. We are owned by the four universities and operate on a not-for-profit basis because it is perceived by the universities that we are fulfilling a need to support that sort of commercialisation.

CHAIRMAN—Are you self-funding at the moment?

Mr Anthonisz—Yes, we are basically self-funded. We have got some agreements in place with government to look at intellectual property from governments, and we have got contracts there with the Western Australian government and the Northern Territory government. We have got a whole series of licensing agreements which are bringing in income, plus we have agreements with the individual universities and we receive consulting payments there as well.

CHAIRMAN—Your submission states that the company is currently working with a Sydney company to develop a commercial model for regional communities to access medical and health care information and preconsultation advice from GPs over private intranets and the Internet.

Mr Anthonisz—Yes.

CHAIRMAN—I do not know whether you were here for Dr Marshall's evidence earlier.

Mr Anthonisz—No, I was not.

CHAIRMAN—Do you have any comment on what the West Australian government is doing with respect to its satellites in allowing other services to hang off those satellites, and, if you think that is a good thing, how do you see what they are doing linking in with what you are doing?

Mr Anthonisz—We originally put forward a proposal for a project operating with one of the regional telecentres in Western Australia. That project is basically still going through the motions, I understand. We are seeking some government support for that, plus we are going to get some support from Microsoft. That is still sort of in the pending tray, I suppose.

CHAIRMAN—Or in the too-hard basket, perhaps?

Mr Anthonisz—Yes, possibly. What we were looking at was—I just caught a little bit of the conversation about expensive video-conferencing gear being set up for $80,000 in hospitals—a very low-cost link-up using secure channels on the Internet or getting Intranets happening and using existing communications using existing Internet service providers and seeing whether that could generate enough moneys for local communities to actually get the communications into those regional areas. Since we have made that submission I think things have been changing fairly rapidly. We have got telecommunications deregulation happening. We have seen the technology change as well. We are probably seeing a lot more options.

I think what the Western Australian government is pursuing in terms of having a range of services and establishing a telecommunications infrastructure that a range of agencies can share in makes a hell of a lot of sense. I think there are too many examples

in regional Australia of different bodies, different organisations, even different government agencies, basically replicating infrastructure for very small populations.

CHAIRMAN—How do you see what you are doing linking in with what they are doing?

Mr Anthonisz—What we were essentially about was not so much the technology—because we see the technology as changing in any case—but getting services up that can be promoted by local communities where they can have some sharing of the income so they can push those services. It is not just simply a situation of government putting money in and running services at a cost. We were looking at some sort of commercial model. We were trying to seek a pilot project for running a cost recoverable model whereby the local communities and doctors can share in some sort of income flow, and we were particularly targeting—we had a town in mind—Brookton, which is a town that has not got a doctor. We were looking at basic services, basic link-ups over the Internet for a town with no GP. So we were certainly looking at the low end of things and trying to establish links, trying to establish some sort of income flow so the local communities could basically expand that down the track.

Mrs ELIZABETH GRACE—I would just like to follow up on that comment. Going back to something that Dr Marshall said, has there been community consultation in setting up this link?

Dr Marshall—Can I just comment, because Keith was not here. This town that he is talking about is one of my pilot things, and Keith has been involved in the committees and the meetings and he is actually talking about—

CHAIRMAN—Dr Marshall, could you come forward and talk into the microphone. You are still under oath.

Dr Marshall—Okay. What he is on about is a little bit different. We have been working together on it. He is working with the community to use what we are putting in place to make a difference for themselves—

Mrs ELIZABETH GRACE—So it is coming from that community base?

Dr Marshall—Yes. It is still that same thing. Brookton is actually one of my 16, the ones I was talking about, one of the ones without the doctor.

Mrs ELIZABETH GRACE—Without the doctor, yes. Okay.

Dr Marshall—They have aged care there—so it is one of them.

CHAIRMAN—You can stay there, Doctor, in case you are needed.

Mrs ELIZABETH GRACE—Could you explain to the committee what the intention is—the statement that you made—that preconsultation services provided over an intranet can support the low-cost access? You have covered this a little bit but could you expand on that a little bit, because you are saying that you feel it will be more expensive in some ways but it will offset itself. Have I explained myself?

Mr Anthonisz—The idea was to have a situation where we were using the local telecentres, and the telecentres are community owned organisations that basically support communications links into local towns and they support things like video conferencing with TAFE, those sorts of services, and then they are basically taking over services on an agency basis of banks and government agencies as they leave town. So certainly in Western Australia they have been quite successful. They have been run by local communities and some of them have expanded quite nicely as well and they reflect local community aspirations to develop themselves.

What we were looking for was a model whereby advice could be provided by GPs for a fee. We call it preconsultation advice. We looked at part of that fee going to the telecentre and the telecentre basically pushing those services into local communities but also the telecentres providing feedback on how valid those services are. So that was the basic model. Until you run a pilot it is hard to say exactly how it is going to go, but looking at some of the other services that telecentres have provided on an agency basis and how telecentres have expanded it looked like a good means for telecentres to provide a service that currently is not available in a town and also share in some of that income for the local community.

Mrs ELSON—Your submissions indicate that you are familiar with the international projects in the United States and Europe. Are you able to discuss what Australia can learn from these international projects and also, given the number of pilot trials being conducted around Australia, do you see a danger that Australia and other countries conducting trials are spending an enormous amount of funds reinventing the wheel?

Mr Anthonisz—With regard to the US and Australia, I think one of the unique things about the way we were looking at it—as I mentioned, the technology side was not the big issue; it was really how can this thing be self-sustaining? How can this thing support itself? Because a lot of the projects in the US, and I think a lot of the projects in Australia today, are basically reliant on a slab of government funding. When the funding comes to an end the project ends. Not all the international projects have been like that, but certainly there have been a lot of examples like that. I think in the current sort of environment that we are looking at, with government expenditure being generally on the decline in so many areas, we do have to look at models whereby local communities arrange—there is a certain performance indicator developed as part of the whole model for putting these systems in place and there is a certain sustainability from some sort of income coming into the system.

I think a good example of that is my experience with talking with federal Health. One of the major concerns was how services—say, telemedicine services that are provided to regional areas—are going to impact on Medicare? Could that potentially lead to a budget blow-out? Those were comments that were made privately, but they certainly indicate the sort of thinking that is in government today and I think it is unrealistic to just think that you are going to get new programs that will be funded forever in the current environment. You might tell me that that is not the case, but that is certainly the feeling I get.

Having said that, though, about looking at models with a sustainable element to them, I think it is important that governments look at taking a lead in areas like telemedicine. We have been heavily involved in looking at some of the things that are happening in Asia. At the moment the Thailand government is funded a telemedicine network that links all their regions with video-conferencing, teleradiology, telepathology. I think it is about six regions with Bangkok. It is quite a substantial program and they are working with their private industry to establish that. You have got Malaysia with a multimedia supercorridor; huge budgets being put in, and they are basically going into new areas, funding new areas. They are basically saying, 'Let's have a range of trials. Let's see what happens and then we'll put in the legal safeguards and a lot of the other safeguards.'

So governments in most countries is taking a lead. They are going into uncharted waters. I think what has tended to happen in Australia is that we have been bogged down by our existing legal and institutional constraints, and I do not think government almost feels like it is in a position any more to take a lead in areas of high technology. So I see a great contrast between Asia, where the governments are trying to lead their countries to grasp the future, and the ultimate goals, aims, the benefits that can come out of this is that there will be increased services to the whole country at reduced cost. That is the long-term goal and I think everyone would agree that that is the potential that telemedicine can deliver. Governments are taking a lead and saying, 'Let's go for this,' not only in telemedicine but in so many other areas of information technology.

I think in Australia we are tending to be constrained. It is unfortunate, I feel, that Australia is no longer a country that is necessarily taking a lead in the region and that is unfortunate. You have got countries like Singapore, Malaysia and Thailand now that are much more willing to grasp the future while in Australia it is more a case of—

CHAIRMAN—Why is that?

Mr Anthonisz—I think it is a different headset. You go to Asia and people have plans. Malaysia has a 2020 plan and it is saying, 'How can we become an advanced society and community by 2020?' In Singapore, which has a per capita income much higher than Australia's, their goal is to be the Switzerland of Asia. We all know how high the currency in Switzerland is. In Australia I do not think we have any vision like that. I

think in Australia we are basically looking at how to reduce expenditure, and I think looking at reducing expenditure alone is not really leading anywhere, because ultimately, if you reduce expenditure to zero, you are not going anywhere.

CHAIRMAN—There has often been a criticism of Australia that, unlike some of the Asian countries, we have no long-term planning. Perhaps the governments of some of those countries can have some confidence that they are going to be in power for some time so they are able to make long-term decisions which might be politically unpalatable, but in this country, where governments regularly change, maybe there has been—up until the change of government last year of course—far too much timidity in that area. We tend to lurch from election to election, rather than look and see where we want to go a number of years down the track.

Mr Anthonisz—You are very right. We are constrained by a lot of institutional legal arrangements. A lot of those are great. A lot of Asian countries do not have those legal impediments and actually there is a dark side to that too. There is a downside to that as well. Having said that, I think if government does want to take a lead in some of these areas and at least keep apace with some of the things that are happening in Asia we have to look at being flexible. When you are looking at a chicken and egg situation, which basically telemedicine is, perhaps take some risks in these sorts of areas.

One of the things in Asia that you have is that not all these government programs work and there will be actual failures along the way, but they use those failures to build upon until they eventually get it right. I think in Australia it happens too many times that, if you have a program that does not work too well, it is shut down. So it is either one way or the other. It is either a success or a failure. There is no middle road.

CHAIRMAN—I think there is some accuracy in what you are saying.

Mrs ELIZABETH GRACE—Changing the subject and the direction a little bit—we were discussing this earlier—GPs have been slow to utilise the advanced technology in their clinical settings and one of the reasons put forward is that the GPs are not taken into account when the technology is being developed and they feel that they have to then modify something that is probably not quite suitable for what they want and they are feeling a bit isolated. Would you like to comment on that sort of a statement and how you think perhaps we can break that cycle and start to include them, producing a program that is suitable for them so that it works in the system? I know there are several programs out there and a lot of them have been devised by GPs themselves, but it is fragmented in that they are all pushing their own personal barrow. Is there some way we can pull all that together to make it work?

Mr Anthonisz—I think the medical fraternity are fairly conservative when it comes to technology.

CHAIRMAN—That would be an understatement, would it not? Present company excepted of course.

Mr Anthonisz—Having said that, if you look at GPs running themselves as small businesses, a lot of small businesses are still pretty conservative when it comes to spending money on technology. They want to see that it is going to have some sort of payback for them. I see the issue of getting telemedicine going more an issue of having services that can be provided to doctors to make the whole step easier for them. I think doctors are rightfully conservative when it comes to looking at some of this technology, because if you end up with a fragmented network, which is basically a fragmented approach to this whole situation, the benefits are dubious. So I do not think they are wrong in taking that judgment on some of this technology.

I think the challenge is for—and I think government has to be involved with this—some comprehensive service network to be provided where doctors can be shown, 'Well, you get on this network. These are the costs and these are the benefits.' Something that makes it simple for them. I do not think it is fair to put it on doctors to learn all about technology, choose what is the best way to go and then build their own network. Some of them are trying to do that. I do not think it is of great benefit to themselves or the country in some ways. I think it is a separate issue.

Mrs ELSON—You have suggested that telemedicine in regional areas of Australia will increase the cost of Medicare but that this is offset by the improvement to the overall health of communities in regional Australia. Could you inform the committee if you have conducted a cost and benefit analysis of regional health which may have influenced your statement?

Mr Anthonisz—No, we have not. We have talked to a number of doctors. We have not put together a comprehensive study on this. It is more based on anecdotal evidence. We have talked to a number of doctors who have served in regional areas as well as metropolitan areas and the differences that they have noted to us in the health condition of Australians in regional areas is frightening almost. I think certainly some of the conversations I have had suggest that it is a major health problem in regional areas and it is not limited to Aborigines.

Just talking to a radiologist, who mentioned that during the numbers of readings that you have in the Perth metropolitan area—you compare that to a regional area and you will get a hit rate many times more so than what you have in the metropolitan area. So if, say, 95 per cent of your radiology images are clear in the metro area, you might get a 40 to 50 per cent hit rate in regional areas and that to me indicates that there are major health problems in regional Australia. That means that, if there is going to be an approach to that problem and if those people are going to be cared for, it is going to cost money, especially when you are talking about towns without a doctor and you are talking about farming communities which will basically work till they drop. It is going to cost more money, I

have no doubt about that at all, but certainly we have not put together a study that comprehensively identifies major health problems in regional areas. But, anecdotally, I would say it is definitely bad.

CHAIRMAN—Thank you very much for appearing before the committee this morning. Thank you once again, Dr Marshall.

[1.25 p.m.]

CHAIRMAN—I ask the secretariat to invite the witness to swear an oath or make an affirmation.

OTAGO, Mr John Vincent, 5 Steele Street, Eden Hill, Western Australia

CHAIRMAN—Thank you very much, Mr Otago, for coming before us this morning.

Mr Otago—I am a medical illustrator. The reason I have put in a submission is that I would like the committee to take into account the area of disability. Like was suggested over here with telemedicine, it is not an inclusive term; we are telehealth.

CHAIRMAN—We have actually had a lot of comment in earlier hearings about telehealth, telemedicine—I think there are even one or two other expressions used. The sad thing is that we cannot seem to agree on a common definition. I do not much care what we call it, as long as we use the same term, but regrettably, I think, it might be beyond us except perhaps we can make a recommendation. But I note what you say as far as telehealth being a preferable term.

Mr Otago—Yes, it is. I do not know how many other submissions and people have come forward and spoken about the area of disability, but it is an area that tends to be neglected. It is an area where the need is probably predictable wherein generally for GPs it is waiting for someone to fall off their tractor or suffer some sort of heart attack. We know that if a child is born, say, with cerebral palsy and if it is a severe case, and depending on the type of cerebral palsy or whatever, the specialists, the doctors, the therapists generally know that this child will have, as I have mentioned, continuing health needs. These needs cannot be ignored, and if that client or that person lives in the country—they could live in some of the outer suburbs and it is a day to bring the person into the centre, to make your appointment, drive back out—that is a day that is gone.

CHAIRMAN—Could you at this stage just explain to us what a medical illustrator is? I presume it does not mean you do illustrations for medical manuals to make them more interesting to medical students.

Mr Otago—Actually it does. Medical illustrators are generally made up of photographers and illustrators or graphic artists. They are generally confined to hospitals and to the teaching institutions. Like I mentioned, there are very few of us who use audiovisual—which is video—technology. Therefore now we go to digital, we go to information technology. We use it directly between the client or the person with the disability; the allied health profession, which we mainly deal with. We generally deal with some specialist but we never deal with GPs. It is the allied health professionals, which are the occupational therapists, physiotherapists and the speech therapists. They are the three major ones. We call ourselves medical illustrators because there is really no other category that we fall into.

CHAIRMAN—I know that you basically say that there is a far greater percentage of the Australian population than 13 per cent suffering from some form of disability. I think you include in that people who are born with a disability, who have a degenerative condition, disability related to age and a disability related to trauma. I think, if you look at a broad definition of all of those terms, we would all be suffering from some degeneration by virtue of age or whatever. Where do you draw the line?

Mr Otago—I do not draw the line. Associations draw the line. I have had a lot of experience with cerebral palsy so I can use it as an example. With cerebral palsy, if you have trauma, you are in a car accident, a near drowning, if you are under six years of age, I think it is, or if you are born with cerebral palsy, then you will be classified as a child or a person with cerebral palsy. If you are 6½ or 7½ or seven and one day, you will not be classified as a person with cerebral palsy. It is just a demarcation line that the institutions use.

CHAIRMAN—Is it arbitrary? How can telehealth and telemedicine benefit those people with a disability?

Mr Otago—In the area of disability, they have come around and now it is called a family centre practice, which means—especially with the children, the younger ones—that you cannot treat the child without affecting the family. The way the family reacts, is cared for, has an immense effect on the child. Where we use telehealth is that, especially with our country and rural clients at the moment, we use plain video. We just send video, we make videos, the children come into Perth into the centre; they generally come with only one of the parents.

They will have six appointments at Princess Margaret Hospital, they will have another five appointments at the Cerebral Palsy Association, and they cram it all in in about three days. So it is just information, maybe a bit like yourselves. It is information overload for this parent. Plus they have dealing with the everyday problems of suddenly realising that their child has a disability and is not going to be the Prime Minister of Australia or any conception that they had of how their children would grow up. We provide them with videotapes of treatment sessions so they can take these videos back. They are specialised, and every disability is individual.

They are specialised so that they can take them back so that the other parent can watch it and have some input. The siblings, the carers in the community, the carers at school—of course we have got an integration problem now so we put them out into the society, into the schools and into employment—can have some sort of expertise into how to treat and care for and handle these children.

CHAIRMAN—How big is the market for medical illustrators and audiovisual consultants in Western Australia, and the nation for that matter?

Mr Otago—I do not know. I do not work for any institution. I work for myself. From my experiences people do not like to employ especially in audiovisual, because in the old days it was very expensive to maintain the equipment. An edit suite will cost you $50,000 or $60,000. Cameras cost you a fortune and things were breaking down. People wanted to upgrade.

CHAIRMAN—But costs have come down considerably.

Mr Otago—Cost halves every year, and we increase the capacity so we have more. We now work on digital, so we have computer based systems.

CHAIRMAN—You also state in the submission that once an economically viable telehealth system is up and operating, especially in Western Australia and the Northern Territory—and you might include Queensland as well in that—it will open opportunities for export markets. It has been put to us, I think, that the possibility for medical exports would be, for the nation, worth five times the billion dollars we get from educational exports. How quickly can we move in, muscle in, on what must be a very lucrative and viable area of export activity?

Mr Otago—My experience is, like I said, with the allied health professions, and from talking to professionals, speech pathologists, physios and OTs, if you go to a lot of Asian countries, north-east countries, it is staffed by New Zealand, English and Australian occupational therapists, physiotherapists. I can give you an example. There is a company called Second Skin who make lycra garments. Jenny Valentine tried to move into a country, and the only way she could move into this country was to provide lycra garments for the horse-racing industry, because that is where they would spend their money, but no-one would want to touch the clients with disabilities, the people with disabilities. They just do not have the infrastructure that Australia has.

CHAIRMAN—What country was that?

Mr Otago—I am not too sure which country it was. I am not too sure, but I could find out.

CHAIR—Thank you.

Mrs ELIZABETH GRACE—My reaction to what you have said, and I must apologise for missing your opening remarks, is that telehealth could actually put you out of business. Am I reading it the right way?

Mr Otago—No.

Mrs ELIZABETH GRACE—How do you see yourself progressing from what you were just explaining then—which I think is wonderful—about videoing all that

information that these people are being bombarded with, and now switching over to this actual telehealth communication? I might add that it has been said that if you have a disabled child or a child with disability you have a disabled family.

Mr Otago—Yes, nicely put.

Mrs ELIZABETH GRACE—So it is very true that everybody is affected.

Mr Otago—For a start, someone has to run the system. You get the practitioners or the therapists and then you have your suppliers, but in between eventually someone is going to run it. Do they expect the therapists to run it or the specialists to run it? They are supposed to be specialising and therapists are supposed to be treating, so someone is going to have to run it.

The second one is that where we would probably use it is in the area of disability. I will give you an example. With a disability you generally have a lot of equipment. You might have leg splints. The children can have lots and lots of problems. If, say, a mother is living in Narrogin and she is worried about the splint—the child's hands turn blue—she will take the splint off, ring up the therapist and make an appointment. So in about three to five months they will come into Perth. They say, 'Okay, we'll make a splint for you.' In another couple of months they will have to come back to Perth, the splint will be made, or she will come in and they will just say, 'You've got it on the wrong way,' or 'You've put it on inside out.' It could be something as simple as that, and a lot of times it is.

If we had some sort of cheap—it does not have to be cheap—telehealth system, whether it is through the Internet, whether it is through what the health department is doing—I do not really care how the mode of delivery is made—that parent can just go, make an appointment by phone, and somebody like the Cerebral Palsy which has got all the expertise for people with cerebral palsy will say, 'Okay, we'll have an appointment at 10 o'clock.' When 10 o'clock comes, the senior therapist or the EATs equipment therapist is sitting there, switches on, she can talk to the parent, the parent can either download it beforehand, or if you have got real-time television or if it is not a moving picture you could maybe download it there and then—these are for the technicians—and she can say, 'What is the problem?' and the therapist can say, 'Well, you've got it on back to front. You haven't tucked this hand in,' or if it is a wheelchair and the child is having trouble with the controls or something, 'Maybe go to the mechanic or if you can do it yourself just shift this forward. It's been knocked,' and it allows compliance.

All these pieces of equipment are prescribed, so they have to be used, or they should be used for the benefit of the child. What we find is as soon as something goes wrong or someone is worried and they do not know exactly what to do, to be able to have this instant communication should allow the client a better standard of health care provided by the family, because that is where they reside, especially children, for 95 per cent of the time.

Plus we can provide maybe an opportunity to not disrupt the family so much. We get them coming down from the country areas and it is a major cost factor, it is a major disruption for the family. There have been studies, and it is the cause of a lot of problems, so we get a lot of single- or sole-parent families.

Mrs ELSON—Mr Otago, having worked 15 years with cerebral palsy families, I know exactly what you are talking about with the isolation, if they are in isolated areas where the family has to separate and live-in where the facilities are. Can you tell me, or would you have an idea, how many people would be living in remote Western Australia that are disabled that need service?

Mr Otago—Everyone who is disabled probably needs a service. I think the Cerebral Palsy Association has on their books—this is not all the people who have cerebral palsy—something like 80 clients, I think. That is just on their books.

Mrs ELSON—I know some are not identified. Some people keep it to themselves, too.

Mr Otago—Once you get old, once you go past the schooling age, they have got all these sorts of regulations. You get over to the health department, and then the health department will only look after you if you are—

Mrs ELSON—Dr Marshall was telling us before about the satellite link-up, getting people to use it. Is there any way as an illustrator that you would be able to use that service to provide doctors with what they are needing to cater for disabled in the remote areas?

Mr Otago—We would definitely be able to use it. I suppose it is preferable to go to Narrogin if you live in say Hyden or something than it is to come to Perth if there is a problem. So I do not see any problem. The problem at our end, whether it is the Cerebral Palsy Association or the MS Society or the hospital, is to have that end link, to have the little console there, whether it is tele or whether it is using the Internet. The difference between the GPs is—and they said they would not use it—in disability you generally work in clinics, so a specialist comes in for three hours and you shove as many people in there as you can get in for them to see. We do not work one to one like you would with a GP. It is all clinic based.

So everyone is used to saying, 'Okay, we've got an EATs clinic, we've got a hand and limb clinic, we've got an orthosis clinic.' So it is that blocked time. That is for the specialists. For the occupational, for the allied health professionals who specialise in, say, CP—because you come out of school, you are shoved into the country service, you know nothing about CP, or you might have concentrated in age, so to have that therapist to have access to the specialised therapists like the OTs and the physios who specialise in CP or MS or whatever the area is, is another area I think that it is not the person having contact,

but the therapist without the experience or expertise that generally accepts the work in the country, because it is their first start—then can have ready access to someone and they say, 'Look at this client.'

Even if they send us a tape. I do not care how we do it. Send us a tape, use the Internet, use the satellite system, but we need to have the ability to give them access for the better care of those people with disabilities.

Mrs ELSON—Thank you.

CHAIRMAN—Mr Otago, thank you for appearing before the committee this morning. We greatly appreciate it, and we will certainly take into account what you have said when drawing up our report. That brings us to the end of this morning's proceedings. I would like to thank everyone for attending.

Resolved (on motion by Mrs Elson, seconded by Mrs Grace):

That, pursuant to the power conferred by section 2(2) of the Parliamentary Papers Act 1908, this committee authorises publication of the evidence given before it at public hearing this day.

Committee adjourned at 11.20 a.m.