



HOUSE OF REPRESENTATIVES

STANDING COMMITTEE ON FAMILY AND COMMUNITY AFFAIRS

Reference: Health information management and telemedicine

MELBOURNE

Tuesday, 15 April 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

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HOUSE OF REPRESENTATIVES
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Health information management and telemedicine

MELBOURNE

Tuesday, 15 April 1997

Present

Mr Slipper (Chairman)

Ms Ellis

Mr Allan Morris

Mr Forrest

Dr Nelson

Mr Kerr

Mr Quick

Ms Macklin

The committee met at 9.00 a.m.

Mr Slipper took the chair.

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

BROOK, Dr Christopher, Acting Director, Acute Health Services Division, Department of Human Services (Victoria), 555 Collins Street, Melbourne, Victoria 3000

CHAIRMAN—Welcome to the second day of this public inquiry into health information management and telemedicine. We did an inspection yesterday afternoon, so this is the second day in Melbourne. I would like at this stage to welcome the representative of the Victorian government. Thank you, Dr Brook, for coming before the committee this morning. I take it you are a medical practitioner?

Dr Brook—Yes, I am.

CHAIRMAN—We have lots of people referring to themselves as doctors appearing before us, including some in health related areas, and it is always nice to know someone who has some medical training. We have read your submission; it has been circulated to all members of the committee. I was wondering if, in a very brief opening statement, you might just highlight some of the more interesting aspects of it to focus our questioning later.

Dr Brook—Thank you very much. The submission is largely self-explanatory, and I will just speak to highlights of it. It emphasises Victoria's desire to put itself, and be, at the forefront of Information Technology development and multimedia development, including in the area of telemedicine and telehealth. Having said that, the issues which are raised in the submission can be addressed as follows. There is a variety of issues in relation to how the future of telehealth is to be funded. There are considerable considerations that will need to be given to the way in which our existing fee for service or other health funding arrangements are adapted in order that it may be adopted, particularly by the private sector. By the private sector, I of course include all general practitioners, all specialists operating in private, and other health care professionals not part directly of the public health care system.

In the public health care system in Victoria, the case mix funding system which we have in place does indeed allow us to adapt funding formulae to take into account changes in technology, which this could be one. So, from our perspective, it would be possible for us to alter our formula-based funding to take into account potential costs associated with the introduction of telemedicine and telehealth as we move towards a roll-out of a system that inevitably will have a greater presence throughout the nation.

We have emphasised in our submission the crucial importance of involvement of all elements of the health care sector, most particularly a practical interface between those components of health care which are distanced from the state public hospital sector such

as general practice in general and private specialist medicine. We have also emphasised the fact that that cannot occur unless there is considerable investment in information and Information Technology systems, an investment which is currently lacking in the health care system infrastructure and is particularly lacking in the realm of general practice. By our estimates, between five and 10 per cent only of general practices have access to computers for purposes other than accounting, bill collecting, et cetera. Even within that five to 10 per cent there is likely to be little adequate training and knowledge in relation to the potential for telemedicine and telehealth.

CHAIRMAN—We have been told 12 to 14 per cent.

Dr Brook—I suppose that it would depend on whose source of information is the more accurate. I guess, at a level of approximately 10 per cent, it gives a dimension of the overall problem. It is not within our capacity to address the issue of Information Technology investment in general practice and in the realm of private specialist medicine. We would urge the committee to take the view that we have put on board, though, and reflect upon the potential that exists for better ways of doing business generally and for an infrastructure without which this process cannot proceed.

In our own sector, we do recognise that there has been also a considerable under-investment in information and Information Technology systems within the state public hospital sector and related agencies, there being many. We have addressed this in Victoria through the development of an I&IT strategy which will be progressively rolled out over the next four to five years. Nevertheless, funds to completely deliver systems capable of interfacing in the future manner required will always be, to some extent, a problem.

If we move on from the issue of the need for infrastructure investment, clearly there is also a significant need for education and training, some forms of central funding support and ongoing maintenance of systems. If I were asked the one thing that I see as the most important change that needs to occur in Australia's health system, I would not talk about financing mechanisms, I would talk about the move to information futures. There is too little understanding of the imperative that the health care system faces in adapting to the information revolution in a manner consistent with other business sectors and service sectors throughout the economy.

The potential for better ways of doing business and for new ways of doing business is still dramatically underexplored. So I state that, from the perspective of the Department of Human Services, the most crucial thing that can occur in the future of health system delivery is better Information Technology and support.

CHAIRMAN—Just before you go on, are you happy that, as a community, we are moving along the road that you would want to see us take?

Dr Brook—There are no specific federal financing mechanisms to enable a roll-out of Information Technology into the private health care world, most particularly including

general practitioners. There are some initiatives that are occurring as part of other government programs—better practice programs and the like—but if the question is whether I think there is adequate Information Technology availability the answer is clearly ‘no’.

CHAIRMAN—Why should it be a federal program?

Dr Brook—For general practitioners?

CHAIRMAN—You said there was no federal program in place.

Dr Brook—Clearly because, in the way of things, Australia does not have a unitary health care system. We have separation of funding and responsibility at the two major levels of government, and we have a private sector as well. For those components of health care funding and responsibility which are the responsibility of the federal government, it must address the issue of Information Technology adequacy. The state clearly has a role in relation to its sector—hospitals, allied institutions and activities. Even there, however, the state does not operate alone. Under the aegis of the Medicare agreement, we have a joint responsibility with the Commonwealth to provide for adequacy of Information Technology in relation to our own sector.

In Victoria, I repeat that we have attempted to address what we perceive to be an inadequacy of Information Technology, particularly clinical Information Technology as opposed to transactional Information Technology, and our I&IT strategy is to be implemented progressively. Without national support, however, that will always be of limited scope—that is direct support in terms of resources, and support in the form of national consistency standards coordination and common approaches across states. There is not much point in all of us developing systems that cannot talk to each other. Does that answer your question?

CHAIRMAN—Yes.

Dr Brook—In relation to privacy and confidentiality, the view which we have developed is that telemedicine should not represent any additional threat to privacy and confidentiality when compared with other existing technologies and that, given that there is a whole suite of national and statutory jurisdictional as well as statutory and professional bodies’ laws, regulations and standards in relation to privacy and confidentiality, we do not regard that as a significant problem in proceeding down this path.

CHAIRMAN—I think you are absolutely right. We have all heard stories of medical records being found on the dump and a lot of the privacy provisions at the moment might in practice not be adequate. So it seems to me to be a bit of a furphy to suggest that technology is going to produce insuperable obstacles.

Dr Brook—Yes. There are some issues which I can only note have been changed since the time that our submission was first put to you, the most important of which is the move away from the proposal to extend the Commonwealth Privacy Act to the private sector. That does not necessarily, of itself, inhibit or create extra difficulties. It does, however, require a different set of thinking about some of the elements of privacy—not confidentiality, just privacy or data protection more correctly—which might pertain to a system in which there will be mixed operators—part public, part private. The role of each part of that needs to be taken into account. What is the role of the private carrier or the private vendor of services as opposed to the actual operator or user of the system? They will need to be thought of in contractual obligations or specific legislation that might impact upon the one or the other. Those considerations in Victoria lead us to the view that privacy regimes should be extended to both public and private sectors and that there should be no in principle difference between them. The ground has moved since that time.

CHAIRMAN—It has not yet been extended to the private sector in Victoria, has it?

Dr Brook—No. I cannot specifically speak to current government policy in relation to the proposed privacy provisions in this state. I was, however, deputy chair of the Data Protection Advisory Committee in this state and the report which we produced clearly stated that there should be no difference in handling between public and private sectors. Indeed, not to do so creates enormous boundary difficulties let alone the other issues of commercial benefit perceived to have uniform privacy laws. The view of government at the time that the DPAC concluded its work was that the Commonwealth should be responsible for the private sector side and at that time there was an active proposal for there to be an extension of the Privacy Act. That has changed and I cannot tell you at what point Victoria will introduce its privacy act and if, or when, it will apply to the private sector.

CHAIRMAN—Dr Nelson and I are of the opinion that when the Prime Minister announced that the Privacy Act was not going to be extended to the private sector, the Commonwealth government was going to encourage the states not to extend the Privacy Act in their own circumstances to the private sector at the state level. So, it might be that there is a lesser chance than before although, given the relationship between the governments, it might well be every much as great a chance that the Privacy Act could be extended. But the federal government did not want it extended at federal or state level, so it is going to be interesting to see just what ultimately happens.

Dr Brook—Yes, it goes outside the strict bounds of this committee's inquiry as to the rights or wrongs, proprietary or otherwise, of extension of the Privacy Act. Suffice to say that independent jurisdictions in my opinion do often make up their own minds about things.

CHAIRMAN—We will not hesitate to express a view.

Ms MACKLIN—This is an important issue that Chris has brought out.

Dr Brook—The origin of the Data Protection Advisory Committee, for your benefit if you have not had access to the report, was the move by agenda 21 of Multimedia Victoria to have suites of services available to Victorian consumers on-line so that they could access various elements of their own information or perform transactions through a PC, through a kiosk or through some other element. There needed to be absolute confidence that there was security of the data which is collected and use of that only for the purpose required. That is the start of the considerations of the group that subsequently looked broadly at issues of privacy and its cousin, confidentiality, which is a different beast and is a right embedded in common law, not statute law.

In looking at that issue alone, forgetting the complexities of the health care industry which did consume a lot of time, it became apparent from the outset that it is very difficult to construct a system which protects data if that data is thought to be public data only when there are multiple players involved in its transmission and handling: outsourced Information Technology capacities, private vendors and carriers. I repeat, it is possible to deal with those contractually but it becomes very complex.

Nevertheless, we do take the view, as I repeat at the outset, that the existence of a new technology of this form really does not change any of the fundamentals in terms of the relatively low risk of major breaches of privacy and confidentiality.

The only other thing that we need to address is the question, to a minor extent, that there needs to be some clarification about risks and indemnity in the use of this technology since there appear to be at least three possible views as to who bears the risk and indemnity—the person at the proximate end of the system who has provided the advice, the vendor, or the place where the service is being delivered. That would be usefully addressed by the committee.

CHAIRMAN—Thank you. I suspect you are going to restore our faith in the Victorian government. The witnesses the government sent along to our inquiry in relation to concession cards yesterday were most unimpressive so it is good to see that there are good people working for the Victorian government.

Yesterday we were privileged to inspect the Melbourne Metropolitan Country Hospital Network pilot project being managed by the Australian Computing and Communications Institute. They have provided a submission to the committee and we will be seeing them tomorrow. I have to say that I was very impressed with what I saw and I suspect my colleagues were.

However, one thing did concern me. You have this linkage between Shepparton and major metropolitan hospitals here in Melbourne, and I understand that similar linkages could be forged with other rural hospitals at a cost of about \$20,000 per hospital. When one looks at the overall cost of health financing, that is a fairly minimal cost to extend an

outstanding service to rural and regional Victoria yet there does not seem to be any major push forward to link other hospitals of the size of Shepparton hospital to this arrangement.

In talking yesterday, we gleaned that one of the problems was how one public hospital would charge for services it renders within this network. We have a public hospital system in the Goulburn Valley and here in Melbourne and the progress of this technology seems to be inhibited because we cannot, as a community, collectively decide whether the public hospital system at Shepparton or here in Melbourne is going to pay for some of the associated costs. It just seemed to us to be a bit pathetic. I was wondering whether you could give us some indication as to whether the Goulburn Valley pilot will become more extensive very quickly and whether there has been a solution found to the problem of financing.

Dr Brook—I need to say from the outset that the country hospital project, like all others that we are currently funding, is designed to be a specific pilot or demonstration project. For that reason alone it is important that we make sure that it is fully implemented and properly evaluated before we simply extend it, albeit that that may occur.

That particular project is now achieving considerable success but it has not been an easy road to hoe. There has been considerable delay and difficulty, not unjustified, in start-up and in implementation, including training. They are the very reasons why when putting in place projects of this sort, or when embracing new technology, for something as different and major as this, we do prefer to look at discrete, pilot, demonstration projects. Call them small research projects if you like.

The cost of establishing systems like that come in different areas. The up-front capital costs are significant. In the scheme of things, that project is the highest cost of all that we are funding in Victoria.

CHAIRMAN—We were told it would cost \$20,000 to put what is in Shepparton hospital into, say, a hospital in Mr Forrest's electorate, or something like that.

Mr QUICK—In Horsham or somewhere like that.

Dr Brook—The cost of linkage is actually quite small but the cost of equipment at either end can be significant. The cost of just Information Technology transfer gets—

CHAIRMAN—When you say 'significant', we were told yesterday that \$20,000 is the cost. That might be significant but it still does not seem to be a great amount of money given the benefits that would flow from that.

Dr Brook—I have to defer to your better knowledge, if that is what you have been told. Nobody has ever suggested to me that it was possible to replicate this service in another hospital for \$20,000.

CHAIRMAN—Plus there would be the cost of the transmission on the lines. But the cost of the capital equipment at Goulburn Valley is, I understand, \$20,000.

Dr Brook—Yes.

CHAIRMAN—So, if that is the case, I do not know why you do not go out and put in another five or six of these overnight.

Dr Brook—We are running a number of different projects and assessing each of them for their relative benefits. However, the project—let me repeat—has a total cost of \$2.4 million over two years; that is, \$1.2 million per annum. So it is not that we are not providing adequate funds for this particular project; we believe that we are providing a significant amount of money but we wish to assess its benefits before we go further.

CHAIRMAN—How long would it take to assess the benefits? Yesterday we had evidence of a ministerial committee in Victoria that has taken—

Mr QUICK—Over two years.

CHAIRMAN—two years to assess some element of concession cards. I would hope that the assessment process in this area would be faster.

Dr Brook—Yes, there is an in-built evaluation process for all of the telemedicine projects and that is by contract to a health care evaluation group running out of St Vincent's. They have already begun their work and done a fairly major literature survey and provided some detailed analysis.

All of these projects will be evaluated. I am not responsible for concessions myself; I cannot comment on speed or otherwise in that regard. But no-one has ever suggested to me that, for \$20,000, this service can be replicated somewhere else. The data I have tells me that the project is costing us \$1.2 million each year for two years. There is something of an order of magnitude difference there, notwithstanding what that set of costs might contain. There is a lot of development in that and there are a lot of up-front costs at the city end.

CHAIRMAN—Would you be prepared then, after today, to consult with the Australian Computing and Communications Institute? Maybe you could drop the secretary a line just to clarify what the situation is because we all came away with the impression that, for \$20,000 a hospital, we could link in other country hospitals in Victoria. If it is only \$20,000, it seems to be beyond any explanation as to why this has not happened.

Dr Brook—Yes, I am happy to provide you with further information. But I do repeat that these are specifically designated demonstration or trial projects. Like any good research protocol, it is unwise to substantially change the nature of it, no matter how good it appears, until you have gone through the process and looked at the results. If that results

in some delay in a project which has already been slow then that delay may be very valuable in the longer term. The further information that I will provide will address both of those issues.

CHAIRMAN—I have a feeling that we have been told that this project at Shepparton is no longer actually a pilot project and that it is now fully implemented. Could you address that aspect as well?

Dr Brook—The fact that it is fully implemented does not change its nature as a pilot demonstration project. It is a contained project that is now fully implemented.

CHAIRMAN—Fair enough. The other thing, it seems to me, with this whole telemedicine area is that we seem to have pilots all over the country on an ad hoc basis. They come and they go. It seems that we are not adequately exchanging information and that we might be, as someone said, 'piloted out'. Perhaps it is now time to say that this technology is beneficial, it is affordable, there are a lot of advantages to the community and perhaps we ought to adopt it no longer as a pilot but as something that should be permanently implemented.

Dr Brook—Yes, and I guess it is a question of whether it is a centrally planned system that puts in place certain specific suites or whether it is evolutionary, and in the way and through whom the issues that I raised earlier are addressed; for example, the cost and responsibility for adequacy of information and Information Technology infrastructure, which is sorely lacking. Clearly, those things cannot occur in a real sense or in a broad sense until those issues are addressed.

With regard to the issue of a subset of questions that you raised earlier about how does one get to have some fee arrangement between parties so that they can actually pay for the cost of this—

CHAIRMAN—Particularly when they are all part of the same public hospital system.

Dr Brook—They may be all part of the same government system, but they are not part of the same public hospital system, they are all independent hospitals with their own boards of management and significant responsibilities.

CHAIRMAN—But they are all paid for by the taxpayer in Victoria.

Dr Brook—They are funded by the taxpayer. We purchase services from them, but they are not part of the crown. They do operate very independently and we have encouraged them to pursue that path vigorously, indeed, in an even more businesslike manner than ever, particularly in the metropolitan area with metropolitan networks.

There are two answers to your question. If there are proven benefits, then why is it

difficult for the parties to come to an arrangement between themselves because, presumably, they are reflecting savings or enhancement to services? The rub probably is that the evidence that I have been able to assess from our own commissioned study of the literature is that, while there are savings that accrue to some parts of the community in relation to the introduction of telemedicine and telehealth systems, the overall costs to the funder of services does not seem to decrease.

This is a problem which is not uncommon in terms of advances in health systems or advances in technology. The question is who benefits. In this instance it may be a whole lot more cost effective for consumers. They may have access to a suite of services they previously could not access for geographic or other logistic reasons, but the cost of services provided to the health care system generally does not necessarily fall.

So the question is: to what extent is that taken into account in government policy broadly in terms of allocation of resource to achieve a better end? If we had to develop a system of charging between hospitals for goods we would only, at the end of the day, provide guidelines as to the things they should be attentive to. It would be for them to arrange their own cost recovery.

Mr QUICK—We heard yesterday an obvious example of savings. Someone in King Island had a laceration and if we had telemedicine on King Island the actual wound could have been displayed on a computer screen and the microsurgery experts at St Vincent's could have said, 'Well look, you do X, Y and Z', but the person was flown, at great cost, to Melbourne, and three stitches were inserted. The person stayed here and then flew back to King Island. There are obvious costs, and when you look at something like the banking industry, they have embraced technology in a huge way—in some cases people think to the detriment of consumers—but there are obvious cost savings—look at the profits the banks make.

Dr Brook—I have no doubt that there are instances where there is potential for significant savings—no doubt. An example such as the one you have quoted is one such. Of course, even there, you would have to separate out which part of which system is responsible for the transport of a patient as opposed to the treatment of a patient, and those sorts of boundary issues are a major difficulty when looking at cost benefits across government—and always will be as long as those boundaries exist.

Having said that, the information that I have is not my perception; it is based on an analysis of all existing literature on telemedicine. It is my understanding from our consultants commissioned to look at this that there is no evidence that overall it leads to dollar savings in the totality of the system. That does not, in any sense, mean that it should be walked away from because it is a problem or because it is too expensive.

It does not appear, either, to result in massive new costs, but what it does do is create better access for people to things which they previously simply could not access for a variety of reasons, or makes easier the lives of people—particularly in the non-central

areas—when faced with particular problems in health.

Mr QUICK—We would like to concentrate on the interstate cooperation. Yesterday, we were talking about Albury-Wodonga with concessions and you are leaping across an arbitrary line—the river—and there tends to be more sort of interstate cooperation there and also, say with Mildura and Wentworth across the river, and interstate we would probably be dragging in South Australia. Following on from that, what interdepartmental cooperation has been achieved in the way of infrastructure development?

I know that the education department is really keen, especially in the rural and remote areas, for the communities out there, especially the schools, to have modern Information Technology. If they are bearing a cost and the health department is going away and doing its own thing and setting up something, is there an interdepartmental Information Technology working group within the Victorian government which says, ‘Okay, what will it cost to put the service in the Mallee or Wimmera areas?’ The departments responsible for that area—for example, national parks and wildlife, education, community services and the housing department—will all benefit from Information Technology infrastructure development rather than each one dipping their hand in their bag.

The cost is \$350,000 divided by 14 departments, which is a hell of a lot cheaper than everyone doing their own sweet thing and setting up pilots and goodness knows what else. Do you have an interdepartmental infrastructure and technology group, or whatever it might be called?

Dr Brook—My understanding is that Multimedia Victoria does have such an interdepartmental group. I am not sure of its status at this point in time, so I cannot comment further. I can comment on the practicality of having one information solution across different sectors. We are ultimately talking about two different beasts. One is information systems, which might be readily accessed by any member of the general public—broadband or net-based systems, as they may be.

There would certainly be some potential to look at public sited opportunities across government. My understanding is that that is part of the role of Multimedia and its considerations. So if you had publicly sited facilities that could be used for a variety of purposes, be they kiosks or in the local library or whatever, they would be active considerations.

That is in terms of general public access to health information, whether it be disease based or whether it be oriented towards preventative health strategies or whatever. You have to look at that completely differently from those technology solutions which are sector specific. They will go into the local hospital or the local general practitioner’s room and link them with either each other or some other parties elsewhere or some central hospital. Many of those require quite specialised software as well as hardware. A good example is telepathology. While the hardware is pretty common and reusable, the quite

expensive software suites that probably have a life of only two years need to be quite specifically purchased and put in place so that you can transmit reasonable images. Without those reasonable images, the whole point of telepathology is completely lost. The same thing is true in teleradiology.

So there are site specific issues that are very specific technology issues. There is at the same time the issue of the general public domain and access to information and some services direct on-line.

Mr QUICK—Do you see your department being responsible and saying, ‘We are obviously taking a major lead in this; we will drag some of the other departments along and say to them, “We want you to kick the tin for a certain amount of money”?’ For example, there might be so many base hospitals within, say, the Wimmera and the Mallee areas. The reason I use that example is because I used to live up there and I know how isolated they are. Each of them would be expected to pick up an individual cost. Whereas if there was a collective responsibility financially, each of those would be linked in, rather than each of them doing it individually or when they can afford to or when the local community can fundraise to pay for it.

Do you see yourself saying, ‘We can put this in. There might be a need for a satellite link up there’? The education department would obviously benefit because they cannot afford to do it. You can say, ‘We’ll set it up but we want you to contribute to some of the cost’. Is that part of this Multimedia group’s responsibility?

Dr Brook—I cannot specifically comment. The only observation I would make again is that unless there are shared benefits, there are unlikely to be shared costs.

Mr QUICK—There will obviously be shared benefits, wouldn’t there?

Dr Brook—By no means necessarily. With Internet technology, all you need is a phone line and a modem. You plug in your PC and away you go. There is not a lot of shared technological benefit in that, apart from the PC. Is that site specific? If that is in the general practitioner’s room, it is not going to be available to anybody but the general practitioner. If it is in the hospital radiology department, it is not going to be available to anybody but them. So that hardware technology and software is site specific. I think it is important to distinguish between what might be general public access facilities and others.

Mr FORREST—But you have assumed that the ISD broadband infrastructure is there. It is not, that is the point.

Mr QUICK—It is not in part of my area in Tasmania and everybody says we cannot afford it. Telstra says, ‘We are not going to put it in because we do not get any benefit from it.’ The local high school is saying that they could benefit from it, and the local aquaculture industry could say that too. Who is going to bear the costs? Nobody can agree, so everyone sits around and argues and it never ever gets done.

Dr Brook—The costs for the satellite dish and cabling?

Mr QUICK—That is right. We are talking about Australia. I know you are concentrating on Victoria, but there are remote areas in Western Australia, Queensland and New South Wales. We can build up this expectation that if we have got this stuff—and some of us think that there are cost benefits—we can open up virtually unlimited potential for the treatment of people. For example, with breast cancer, if a woman in Katherine had to fly to Brisbane, instead she could be in the Katherine area and be linked to God knows where, internationally as well as nationally.

How do we get this interdepartmental cooperation when there is a cost and everyone is sitting around waiting for somebody else to come up with a pilot which proves that such and such a reason is sufficient in order to expend, as you say in this case, \$2.4 million over two years? You might only have to spend \$1 million over two years if some of the other departments contributed, because there is an obvious benefit once the technology is put in a specific area that they can access it—for example, rural fires boards.

Dr Brook—In terms of whether we would have any aversion to contributing to the placement of common technology such as satellite receiving dishes and cabling, the answer is no. Do we have specific processes to put that in place at this point in time? The answer is no. Is there potential for that in the future? Can I take that on notice and come back to you. But we have no problem with that set of approaches.

Where I think one, I repeat, must be careful is the assumption that, by putting a satellite dish and some cables in, you have got something that is commonly accessible to different parties, because the solution may be very specialised and site specific.

Ms MACKLIN—I want to go on to the area in your submission that talked about general practice and community based services. I am interested in drawing out your views about three different issues. One is how you think the divisions of general practice are going in their use of technology—at a much lower level than some of the other things that people have talked about today—in improving the linkages between public hospitals and general practices around the state.

Secondly, and in part link to that, what do you see as the potential for people carrying their own health information as a result of improved technology? Thirdly, on a not entirely related issue, I know you are well aware of the coordinated care trials that are under way, a joint project between the Commonwealth and the states, and I would be interested in your views about what Information Technology offers to those coordinated care trials and how you think that is proceeding.

Dr Brook—In relation to divisions, the whole process of the changing nature of general practice in Australia is fairly slow, perhaps necessarily so. It is clear that divisions have been a major advance in almost everyone's eyes in terms of the capacity for coordination across groups of general practitioners. They do, however, still rely upon the

voluntary cooperation of GPs in a given area to actively participate. What tends to happen, as with all things in medicine, is that enthusiasts are enthusiastic and others are not.

With regard to our specific dealings with general practice, I cannot give you a precise answer, other than to say that, in terms of information systems, divisions themselves are reasonably well-equipped generally across the state. So it is possible for us to e-mail or fax information to divisions and then have it distributed by them.

Ms MACKLIN—From the acute hospitals responsibilities that you have, do they take some responsibility to be able to communicate with the divisions? It is obviously not just a one-way street.

Dr Brook—I was talking really about departmental communication with divisions. It is a different—

Ms MACKLIN—But obviously the hospital communication is more important?

Dr Brook—Correct. It is at different stages in different places. Both the north-eastern health care network and the southern health care network have moved considerably down that path. The north-east health care network particularly, I think, has very clearly established communication protocols with general practitioners by the use of whichever technology is available to them.

There has been a lot of attention placed on the importance of adequate discharge information, discharge planning and involvement of general practitioners over a rather longer period of time. Again, I would have to go back to laws and say that the major inhibition is that we have a separation of involvement in relationships which comes fundamentally because of the different nature of the sectors. We have a private general practice sector which is funded by and responds to initiatives of the Commonwealth, not necessarily in any sense in coordination with states. We have a state funded sector that is trying to do its business. Those interface issues can be real problems for us.

Ms MACKLIN—Has the technology and the creation of these new arrangements helped, do you think?

Dr Brook—Has technology helped?

Ms MACKLIN—Yes.

Dr Brook—I think undoubtedly. Just the capacity to be able to communicate to a group of general practitioners by PC and have a reasonable expectation that, however they go about it, there is a communication channel that they can then develop with their own—

Ms MACKLIN—Your recommendation is that the only way that is going to advance is to have a national information strategy, to get PCs into GPs' offices. One of

the problems is, obviously, that a lot of them do not have them.

Dr Brook—Yes. I do not know whether you were here at the time when I said that, if you ask for a personal view, I think development of comprehensive information and an Information Technology strategy is probably the single most important thing that needs to happen in health services reform over the next few years—more important than Commonwealth-state financial relations, which are often lost in arcane discussions about political-fiscal imbalance and other things.

Ms MACKLIN—I would agree with that.

Dr Brook—But in a practical sense, the lack of capacity of adequate electronic clinical information systems, both in private practice—GP, specialist or whatever—and in hospitals, is a major dilemma for us. It is a dilemma for us on two fronts. It inhibits us from any really capable sense of adequate health systems planning. That is a macro-level consideration that does not require a PC on every desk. But, equally, in terms of preferred approaches to changes in hospitalisation techniques, better use of community-based resources, case management or whatever, it is impossible to do that unless you have all of the information that is required available to you live, in terms of dealing with the actual patient there and then. So there is a micro and a macro level, both of which are crucially important.

The second thing you asked related to the Victorian government's view on the electronic personal health record. I would have to say that it is regarded as an inevitability. Whether it is in the form of a personally held smart card or whether it is in the form of a stored card to which there are specific keyed access approaches is a technological issue. But it is an absolute inevitability. More mature debate about privacy and confidentiality in recent years has been helpful in terms of overcoming some of the anxieties that were clearly present in the mid-1980s in relation to consideration of those approaches. I am sorry; I have forgotten your third question.

Ms MACKLIN—Coordinated care trials.

Dr Brook—I think Mr Quick or Mr Slipper referred to being trialled to death. Lots of things do trip over each other when we look at some of the things that we are attempting to achieve. Coordinated care trials are still in development. They are not in an active phase here. We are very hopeful that we can proceed with at least some of the coordinated care trial proposals.

It would certainly be of enormous benefit for those coordinated care trials if there were the capacity to link directly, through adequate Information Technology, with each of the participants. If we take, for example, one of the proposed trials in the southern health care network, where it is proposed to identify a coterie of patients who actuarially will have high health care costs through admissions to hospital, who will have high medical benefit schedule costs through repeated visits to general practitioners, private specialists

and pharmaceutical costs, the desire there is to see whether interventions in the form of case management can effect a reduction in acute care admissions through better management of the patient's underlying condition. So the patient is better off and the system is better off, through pooling existing resources—state funds currently applied to hospitals; obviously, they would have to be prospectively identified because the patient will be either coming or not coming live—and pooling funds from the medical benefits schedule and pharmaceutical benefits scheme.

That trial must involve general practitioners, particularly, and some private specialists operating in their rooms. It would clearly be hugely beneficial and would reduce the costs of coordination and case management if information systems were in place, but they are not.

Ms MACKLIN—They're not, and they are not going to be?

Dr Brook—It is impossible for us to deal with all of those issues in something as big as that. They will be partly but not completely. A similar thing may be seen in the north-eastern health care network trial which is more focused on aged care and substitution of care where, again, the general practitioner involvement is of primacy.

Dr NELSON—I disagree with you on technology being the single biggest thing we could do for the health system because, as is obvious from this inquiry, whether it is technology, whether it is concession cards or coordinated care, it is vertical fiscal imbalance and the nature of Commonwealth-state relations which is stopping us from progressing anything, at the top of which would be technology.

Has the Victorian government been able to develop a model for evaluating the cost benefits of telemedicine Information Technology in health care, both financially and socially? Like you, quite a number of the people who have spoken to us have said, 'We don't think there is a lot of money to be saved, but there are probably significant social benefits.'

My second question is: it seems to me that Australia's economic future relies largely on the technology facilitated export of knowledge and expertise, particularly in areas like health and education. Is the Victorian government looking in any direct sense at using technology in telemedicine to export high tech health services, particularly to South-East Asian countries, whether it is in tele-radiology, tele-pathology or any other areas of medicine?

Dr Brook—In relation to exports, yes, there is attention. Clearly, the Victorian government perceives itself to be a leader in multimedia and technology development and wants that to continue. Certainly, at least some of the projects are viewed as potential vendors, particularly in Malaysia, where the technology super-corridor development is of great interest to us in Victoria.

We have a fairly good track record of exporting information in any case, but not at this point charging for it. I refer to the Department of Human Services' own Internet site, HealthNet Australia, which is by far and away the most comprehensive health information site in Australia and is accessed by 250,000 persons per month.

CHAIRMAN—What proportion would be abroad?

Dr Brook—A very substantial proportion are abroad. I am trying to think of the numbers; there are several thousand visits from persons in the United States each month and 176 per month from the US military, whatever that means. It is an extremely broad audience. I receive E-mails and indeed hard copy letters from people all over the world.

HealthNet Australia began as a public health initiative and displays predominantly public health information, but it has been expanded to display now a range of information about everything the Department of Human Services does. The reason it is successful is not because it is novel, but because it is of extremely high standard and well maintained. So you can put something out there, but it has to be well maintained and be of high standard in the first place for people to want it. So it is comprehensive, of high standard and well maintained.

That is a platform which we are certainly looking at, too in one of the projects. We are looking at the personal health information project which involves ourselves, Multimedia, the federal government and Johns Hopkins University. It is looking at whether there is the capacity to develop a specific suite of information that is useful in assisting people to manage their own disease and take steps to avoid future health cost. With those sorts of things it is difficult to say, 'Well, here is a great thing. We will package it up and export it', but they are the sorts of developments we are looking at.

Dr NELSON—But at this stage you are not actively involved in the sale of educational or professional services to other countries through this technology?

Dr Brook—A number of the companies associated with the pilots are attempting to gain access to that market. We are not specifically marketing services ourselves, nor necessarily would we as the Victorian government. We are certainly keen to sponsor development of product and have it marketed by the private sector.

Dr NELSON—And what about an evaluation model for costing at the moment?

Dr Brook—As to the evaluation model, I think I mentioned that we had commissioned Ian Macdonald and Sophie Hill, amongst others, at St Vincent's Hospital centre and their task is to assist us in providing the intellectual horse power and hard work to devise such a model. At this point in time they are only as far as a comprehensive literature search and analysis of some of the social and consumer issues that are of importance in assessing consumer and social benefits in terms of Australian medicine.

Dr NELSON—Does that mean that, if we were to look at any one of these pilots that the government has to its credit been supporting, there is not actually any model being applied to evaluate any one of them that will in the end say to you in a year or two year's time, 'Well, this was at a financial cost or there was a financial or social benefit'? Will you be able to measure that?

Dr Brook—That is the point of commissioning Ian Macdonald and Sophie Hill. That evaluative framework starts now and is in place by the time the projects are completed so that there can be a proper evaluation of them.

Mr FORREST—I have a question about the absence of a medical benefits schedule item to encourage the use of this technology. Yesterday we saw an example of some of the excellent work the Victorian government has encouraged with the treatment of epilepsy. One of the comments made was that in a great majority of their cases—after the digital imagery of the brain and all the rest of it—there is no operation resulting. It was decided to be unnecessary, so the hospital itself has no revenue stream and yet it has used this expensive technology. Are there any suggestions you would like to make to the committee on how to overcome this, given that it must be acting as a disincentive for people to get into IT?

Dr Brook—Yes. The CASI funding system is one which is progressively being extended in Victoria to include non in-patient services, both in the emergency and out-patient setting. It is in our interest when new technological applications arise that are generally cost beneficial to be able to take those into account and provide funding for them. We had a discussion earlier about the importance of maintaining a pilot or demonstration project as one with boundaries. But if it proves successful and the evaluation demonstrates that it is beneficial and cost beneficial, then it is extremely simple in a formula based funding system to take into account certain sets of costs that might not necessarily be reflected in current funding arrangements.

To the extent that they relate or are attached to in-patient episodes, it is easier again because the cost weighting system and cost development system, which is redefined each year in any case, is already in place. For non in-patient services, it is only developmental but it is planned to be at least partially implemented this year. It is a long way of saying that we can do it. As far as the private medical sector is concerned, that is a federal responsibility.

Mr FORREST—That is the remuneration to the specialist and doctor themselves, but I am thinking about the hospital.

Dr Brook—Our system does not fund doctors, it funds hospitals.

Mr FORREST—So your system funds the hospital and it has made up for the deficiency in revenue, has it?

Dr Brook—If following evaluation this is seen as a path to pursue, then what we would do is rearrange whichever relevant part of our formula we would need to so that there is a transparent price payment for that particular valued good.

Mr FORREST—On the question of benefit, if the use of this technology results in better health and better outcomes, then that is a benefit but I suspect that that is not taken into account when people say that the cost benefit is not there. If the community as a result has better health, it saves us money, then that ought be part of the equation, demonstrating the benefit of the use of this technology, shouldn't it?

Dr Brook—I can only comment that my substantive position is Director of Public Health, I am only Acting Director of Acute Health at the moment. It is not an argument lost on me, but gaining any action in terms of investing in future health benefits is always difficult.

CHAIRMAN—Can you discuss how Victoria would approach the process of multi-state registrations of health care professionals, particular given the fact that telemedicine consultations will often go across state boundaries?

Dr Brook—We have put it in there as one of those things that needs a bit of resolution. We have no in-principle difficulty. Medical practitioners registered by other state medical registration boards are automatically registrable in Victoria, there is mutual recognition. It is not a particular issue as far as we are concerned, but to the extent that there may be problems there needs to be attention just given to that level of detail.

CHAIRMAN—But if, for instance, you are exporting your services into Malaysia, I imagine that Malaysian medical practitioners would not have automatic registration here and that sometimes, if you are dealing with people who are not qualified here, you obviously need some appropriate protocol to permit those dealings. Are you looking at any particular scheme to obviate difficulties which would occur?

Dr Brook—I briefly mentioned to you that we need to look at the issue of risks and liabilities. I think that is part of risk management. Who is responsible for what bits of it? Does an Australian provider become responsible for an adverse outcome in Malaysia or vice-versa and, if so, who is liable? There is a glib answer to that which is to say, 'It just needs to be sorted out'. There is a more sophisticated set of problems that lie beneath it that I think you are right to highlight because as the world becomes smaller and smaller and we access each other's services across the globe, we have to think through some of those issues in a more profound manner. Perhaps it even goes back to some of the privacy considerations I mentioned earlier.

CHAIRMAN—Thank you very much for appearing before the committee this morning. Hansard will send you a draft of your evidence for you to check. Before you leave, would you please see Hansard to make sure that they do not need anything else. Feel free to stay for morning tea and as long as you wish.

Dr Brook—Thank you.

Short adjournment

[10.09 a.m.]

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

BROADBENT, Dr Robert, Executive Director, Royal Australian and New Zealand College of Psychiatrists, 309 La Trobe Street, Melbourne, Victoria

EPSTEIN, Dr Michael, Honorary Secretary, Royal Australian and New Zealand College of Psychiatrists, 309 La Trobe Street, Melbourne, Victoria

CHAIRMAN—Thank you very much, gentlemen, for appearing before the committee this morning. Would one of you like, in a very brief opening statement, to summarise the key elements of your report to help us focus our questioning?

Dr Epstein—Yes, thank you. The Royal Australian and New Zealand College of Psychiatrists is the group that represents psychiatry in Australia and New Zealand. It has over 2,000 members of whom about 1,500 are providing clinical services in these two countries. We are very grateful for the opportunity to speak to you today. Australia has a proud tradition in the use of technology in medicine, and one only has to look at the development of the pedal radio and the Royal Flying Doctor Service to see that we have been pioneers in this worldwide.

As I see it, the term ‘telemedicine’, and the various definitions of it that have been used, means the use of electronic communication and Information Technology to provide or support clinical care at a distance. This can include teleconferencing, telemetry and tele-imaging. I also think that nowadays we should be thinking about it in terms of providing information. I am referring specifically to the resources available on the Internet. Anecdotally, I use the Internet in my clinical practice several times a week to provide information to patients and also to research matters that have been brought to my attention by them. I find that most useful.

It is clear that in Australia and America there have been very major developments. I do not know whether the committee has had a chance to look at the telemedicine report to Congress which was released recently, and there is the development of the federal telemedicine gateway Web site. We estimate that between 40 and 50 video-conferencing health sites have been established in Australia. It is interesting that, in comparing Australia with the US, there is some difference in the way in which telemedicine has developed. The US seems to be focusing more on cardiology, radiology, orthopaedic surgery and dermatology, although psychiatry is also a significant player, whereas in Australia end stage renal disease management and psychiatry have been the major specialties involved.

In Australia, we believe that the major problems are to do with a lack of coordination in mental health services and maldistribution. It is worthwhile bearing in

mind that, in any one year, about 20 per cent of the population have a mental health problem, of whom nine per cent have a mental disorder and three per cent have a serious mental disorder. We find it most disturbing that anywhere between a quarter and a half of those with a serious mental disorder get no treatment of any kind. Many of those people are in rural and remote areas.

We are particularly concerned about such sub-specialties as child psychiatry and psychiatry of old age. We believe that telemedicine can assist significantly in psychiatry, dealing with both maldistribution and poor coordination, but it is a means to an end, and it requires service providers to be there in rural and remote areas to actually provide the service.

The number of functions that have been developed using telepsychiatry include consultation, liaison and review, treatment, clinical support to people providing treatment, discharge planning, formal supervision, teaching and training—I will refer to that briefly later—and the education and professional development of rural and remote hospital and mental health staff. It can also be useful in administration. There is clear evidence that it is clinically effective. Patient satisfaction is high; they are very comfortable with the technology that is being used. You will know of the two G7 projects to do with psychiatry and its provision to rural and remote areas that are in stages of development in WA and Victoria.

We believe that the effects for patients involve ready access to consultation in emergencies. This means that you do not have a situation where patients are deteriorating before they have a chance to get appropriate treatment. Service providers in the area feel comfortable knowing that they are implementing the right sort of treatment. They can have ready access to further consultation and discussion and significantly lower their level of anxiety. It does of course also avoid the need for people to have to be moved to city centres. Moving is costly; it is dislocating for them; it delays their recovery. It leads to them being very isolated and away from their normal support systems. It reduces the involvement of their family and friends in understanding the process of what has happened and assisting them through the discharge procedure.

As far as health professionals are concerned, it reduces their sense of isolation. It is very clear that one of the reasons that health providers are reluctant to work in rural and remote areas is that professional isolation. It increases their access to information and their ability to develop mental health skills and to share their rural experience and expertise with others including people in the city.

I wanted to refer briefly to supervision. At the moment the supervision is being provided to trainees in Mount Isa, Townsville, Alice Springs and Darwin. We also have a telephone link with a person in Hong Kong. There is clearly significant progress so that we understand what needs to be done to implement and develop telemedicine in psychiatry. I will not go into that in much detail except to say that it clearly has to involve

key stakeholders at an early stage. It has to involve some training and evaluation at an early stage.

The issues that we see relate to security, confidentiality, ethical standards, funding, legal liability and evaluation. The college is in the process of establishing a telepsychiatry special interest group. We support Professor Yellowlees who is looking to develop an academic unit of telemedicine which will be multi-disciplinary and multi-site.

CHAIRMAN—Thank you very much. I must say that we were impressed with Professor Yellowlees and also Dr Hawker who appeared before the committee earlier. The teleconferencing arrangements with respect to interviewing psychiatry patients at a distance appeared to have been very successful. Telepsychiatry seems to be one of the more appropriate uses for telemedicine. Obviously from what you have said, you would agree that it is a very appropriate use.

The problem that is constantly drawn to our attention is the failure to include an item in the medical benefits schedule which of course discourages people from using this technology if they are not going to get paid for it. I know doctors are altruistic individuals but by and large sometimes an incentive is needed. What kind of change would you like to see to the medical benefits schedule to encourage the more wholehearted and regular use of telepsychiatry?

Dr Epstein—As you know, the medical benefits are only payable for face-to-face consultation.

CHAIRMAN—It really is crazy given modern technology.

Dr Epstein—Yes. One of the points that I think we need to bear in mind is that we are talking about a situation where there is a very changing technology. I do not want to lose sight of the fact that some good work can be done over the telephone. We are not just looking at telemedicine as people understand it in the higher tech sense.

Our view is that what is important in terms of medical benefits is to have some system that is able to be audited. We feel that telephone calls at a distance and telemedicine have very clear systems in which one can know how long the process went for. We feel that it is very auditable. We feel there is really no constraints from that point of view. We see it as simply a matter of inertia.

CHAIRMAN—There have been a lot of pilot projects particularly with respect to not only telepsychiatry but other areas of telemedicine. There have been suggestions that we are about piloted out. Really we are now at a stage where we ought to be looking at the full-scale implementation of the technology. Do you see the failure to include an item in the medical benefit schedule as being the major inhibiting factor to the regular use of telepsychiatry?

Dr Epstein—I think there are two responses to that. The first is that one of the major concerns we have had is that there have been many pilots done and there is no central clearing house where people can look and see what has worked and what has not worked and what has worked with particular populations. We see that as leading to pilots being redone and redone. It is about time some of these pilots started flying.

CHAIRMAN—Absolutely correct. This is the message that we are getting with witness after witness.

Dr Epstein—One of the issues that we raise again and again is that private psychiatrists in fact do the bulk of psychiatric treatment in this country. However, private psychiatrists, by and large, have been totally excluded from telemedicine and telepsychiatry except on a pilot basis. They have been funded on the basis of particular pilots and, of course, once the funding ceases their involvement stops.

Speaking to my colleagues, I know that they are more than interested to work with this. They feel very responsive to the fact that there are significantly large areas of the country that have poor access to psychiatric services. They would like to help but, at the same time, they have got to make a living.

CHAIRMAN—Absolutely.

Dr NELSON—Dr Epstein, you have heard me ask the question of Dr Brook about cost benefit. Professor Yellowlees, for example, was not all that certain that there would be any cost savings to the health care system and therein the taxpayer from the introduction and use of telemedicine. In fact, there are some reports we have seen from the United States that suggest that there might be actually higher costs involved. Has your college done any work on evaluation in terms of both financial cost and social benefits? The other thing I wanted to ask you is, do you feel psychiatrists will need any specific training to effectively use telemedicine and provide the sorts of services you referred to in your introductory statement?

Dr Epstein—If I could deal with the second issue first, it is clear that— incidentally Professor Yellowlees is our adviser in these matters too—for the best use to be made of this sort of equipment, people need appropriate training. It is slightly different. Just because you are good in face-to-face work does not necessarily mean that you can immediately pick up some of the subtleties that are involved in working through a telemedicine set-up.

The other issue that has emerged from what Peter Yellowlees and Fiona Hawker have done is that Dr Yellowlees talks about a burgeoning use of telepsychiatry in other than face-to-face work. This has been extremely beneficial in making people who are at some distance feel that they are able to tap into metropolitan expertise. They feel much more comfortable in dealing with people who otherwise might be much more difficult to

manage and might require removal to metropolitan settings.

I think that, as he says—and as I have seen through looking through the literature—there has been a real paucity of information about cost-benefit analysis, partly because what we are looking at is the technology, not a particular form of medicine. We are looking at a technology that assists medicine rather than actually replaces medicine. With a direct economic analysis, it may well be that the costs are more than otherwise, because you are providing services that you were not providing before. That is always going to be more expensive.

Mr FORREST—One of the things that I had expected would be a benefit would have been the reduction in the amount of visitation out to the isolated areas. It seems in your submission that you are suggesting that this telemedicine is really just an add-on to improve a service, not to save the cost of specialists and patients travelling backwards and forwards. Am I taking too much out of the strength of what you said in your submission?

Dr Epstein—I think you are, slightly. It always worries me that, in medicine, technology can overtake dealing with people. Psychiatry, more than perhaps any other area of medicine, actually deals with people and we try not to forget that. As much as technologies can seem to open opportunities, you need people at the other end to be able to make use of what has been learned from the use of the technology.

We are saying that, yes, it is likely that we will be able to make more use of city based, metropolitan based and large regional centre based psychiatrists to provide expertise by telemedicine in other areas. What we are also saying is that we need to have people on the ground in those other areas who have got some training in mental health work. We think we will still need psychiatrists in rural areas. It will certainly cut down the number of flying visits to and from, but I think you still need people to go there periodically to see what is going on, to get a feel for the place and to see what sort of problems might be developing. To be able to actually see somebody in the flesh is of benefit.

Mr FORREST—We have seen some very good examples of South Australian work in the use of tele-psychiatry where they have felt comfortable that this lack of human contact was overcome by having at least a qualified person at one end with the close-in contact, and that all of the appropriate signals needed—the body language, et cetera—were appropriately conveyed through the video conferencing. Even with that, it would at least reduce the amount of time that the specialist would need to travel.

Dr Epstein—I agree. I wasn't saying that we need to have 500 psychiatrists in the country. What I was saying is that, for the information gained through this consultation process, there needs to be people on the ground who are trained in mental health areas. They do not necessarily have to be psychiatrists.

Mr FORREST—Would those people on the ground need to be as highly qualified as the centrally focused person?

Dr Epstein—I do not think so. What they would need to have is some basic training, to know what they can deal with and what they can't deal with and to know when to call for help.

Mr ALLAN MORRIS—I tend to share your concern, and I was thinking about the charisma thing. Having watched a lot of people in the flesh and on television and seen two entirely different people, I really do wonder at times just how reliable it is. Toss into that the white coat syndrome, and I can see a TV syndrome becoming a component. I think there is a real danger and I guess I share your apprehension about it being a panacea. I think it is going to have to be backed up by face-to-face contact because of those cases and the possibility of misdiagnosis.

The second point I want to raise is the need to integrate into that system the actual pathology component, because so much of psychiatry now involves medication and blood tests being done. There is a real danger that we will end up with two separate systems—the first one dealing with pathology in terms of blood tests and medication and the second one dealing with face to face or video to face, which is a real danger of fragmentation.

You made the point that most psychiatry is private, yet most pathology seems to be public. How can you be sure that pathology results, medication results and the testing that is required to be done actually interfaces in an adequate way without running a parallel system?

Dr Epstein—In psychiatry per se, as opposed to medicine generally, there are relatively few specific tests that are required to monitor progress.

Mr ALLAN MORRIS—What about lithium, for example?

Dr Epstein—Lithium is the prime example, of course.

Mr ALLAN MORRIS—There are a number of quite common treatments which do require fairly constant monitoring and fairly constant observations as well as blood testing.

Dr Epstein—Yes. They are treatments where the critical issue really is the timing of the taking of the blood. When the test is done is not that critical as long as the people involved know the results. There may be some days' delay before those results are received as opposed to the city ones where one can have the results within 24 to 48 hours. There is no way that telemedicine is going to be any faster or any slower in providing results.

Mr ALLAN MORRIS—There is a danger that, because you can have a teleconference and you can see a person, which is relatively easier, it may be much harder to get a blood test taken and a blood test done in a remote, outlying area.

Dr Epstein—Yes, I think that is right. But what I was talking about was that health providers who actually are in the rural and remote areas—I am talking about GPs, nurses and so forth—are people who are experienced in taking blood and they would have the expertise to be able to do that.

Mr ALLAN MORRIS—So who manages the patient—the guy at the end of the video linkage or the person at the other end who may be only minimally trained in mental health? I am concerned about how you actually pull those two parts together to make sure you do not fragment the treatment and therefore perhaps misdiagnose or mistreat.

Dr Epstein—I think there are a couple of issues there, one of which is the issue of liability for who is actually the prime treater. By and large, I think in that situation it is the person who is on the ground who would have to be the prime treater. The major way it has been used has been in the consultation role and treatment responsibility remains with the GP, by and large.

Mr ALLAN MORRIS—Perhaps Dr Epstein may think about this some more, because this really does raise a fairly serious problem. If the GP is the primary treater and the condition is actually a psychiatric illness, the danger of the GP mistreating or being seen to be negligent simply because they are not a psychiatrist is quite high and may in fact be a major impediment. Therefore the rationale to the protocols between the psychiatrist and the GP so that the GP isn't held responsible for what may well be a system failure—

Dr Epstein—You have raised that issue in the context of this particular committee. At the same time as I have been preparing for this, I have also been dealing with a joint consultative committee report from the College of General Practitioners and Psychiatrists to look at shared care arrangements. A number of models have been looked at in that context, including ones using telepsychiatry, telemedicine. What we are talking about here is using telemedicine as a way of increasing the expertise of the general practitioner that might not otherwise be available. The point you have made is true but, at the same time, at present, without access to these sorts of facilities, people are being treated worse.

Mr ALLAN MORRIS—I am with you there; I am not disagreeing. Perhaps you might give us some comments later, if you are doing a joint exercise, as to how the two professions see that responsibility being developed or interfaced, because there is a real danger—

Dr Epstein—I think that is true. But also it is important to bear in mind that psychiatrists have always had a dual role of being consulting to general practitioners and providing treatment. About 50 per cent of the consultations done by private psychiatrists are fewer than four visits, which we assume are to do with consultations. There is a lot of consultation work being done, so it is a familiar process for psychiatrists to evaluate and give advice to general practitioners about treatment. We are talking about doing that at a

distance.

Mr ALLAN MORRIS—The committee may find it attractive to encourage governments to actually accelerate this technological process and to expand it, but there is a real danger in doing so. We may create a gap between the two professions or create a problem of ethics or duty of care between the two professions, and we need therefore—

Dr Epstein—Yes, I think that is true. One of the issues that have been raised in America has been, if your capacity to diagnose is greater when you see somebody face to face, what is your liability if you are treating somebody and diagnosing somebody through teleconferencing.

Mr ALLAN MORRIS—Any further comments on that would be helpful, not today necessarily.

Dr Epstein—Yes.

Mr KERR—I want to ask a couple of questions arising out of your introductory remarks. You said something like half of serious mental illness was undiagnosed and untreated. How could one put forward that hypothesis if it has not been observed?

Dr Epstein—We know from epidemiological studies in equivalent countries to ours—and there is about to be a study starting under the aegis of the national mental health strategy which looks at the overall morbidity of the population—that about three per cent of the population have serious mental illness. If you are looking at a population of 20 million, then you are looking at three per cent of 20 million. If we then look at the number of patients who are having treatment in state-funded psychiatric services or are being seen through Medicare, we see that there seems to be a shortfall. There is some dispute about that, but most people would agree that somewhere between 25 and 50 per cent of people with serious mental illness are probably not getting treatment.

Mr ALLAN MORRIS—It has actually been shown by Professor Kosky's work on the homeless who are picked up and tested and are found to suffer from a psychiatric illness and they have never been diagnosed or treated. They are picked up in the juvenile justice system or the justice system and discovered to have an illness that was never diagnosed. There has been quite a lot of work done on that.

Dr Epstein—Just to add to that, Dr Broadbent has reminded me that one of the major problems which led to us being involved in work with the general practitioners was that general practitioners have a low rate of pick-up of serious mental illness.

Mr KERR—The next logical question is: what are the adverse consequences that you see flowing from this significant shortfall of provision of treatment facilities? It does seem a very peculiar assertion to say that half the people with serious mental illness are

undiagnosed and untreated. Obviously, an extension of provision of treatment and identification of those people would have some consequences—both in terms of cost and, presumably, some benefit. What do you anticipate would be the cost-benefit breakdown of this?

Dr Epstein—Bear in mind that I am saying between 25 and 50 per cent. I am not saying 50 per cent. I am talking about a range. If one looks at the direct economic relationship, it is clearly going to be more costly to treat that group. On the other hand, one can extend that more broadly and look at the costs involved in other treatment services that are provided. For example, a patient of mine, whom I have been treating for panic disorder, in the four years before he saw me had something like 30 ECGs and was hospitalised five times at enormous cost to the community. Since he has been treated for his panic disorder, he has had no hospitalisation. The only treatment cost is to see me every month and to take medication.

They are the sorts of effects that cross into other areas of medicine. They also cross into areas of social security. They also cross over into unemployment, family breakdown and so forth. I think there is a very extensive cost to the community from the fact that people are not getting adequate treatment.

Mr KERR—Extending this slightly more broadly, I would be quite interested in seeing some serious analysis of what you say are the conditions people suffer in this untreated 25 to 50 per cent and ways that they might be reached. If the hypothesis you are putting forward is true, there is a significant shortfall in the provision of our public outreach to people who are in need of the provision of medical services.

Dr Epstein—Absolutely.

Mr KERR—That may or may not warrant significant additional public resources being applied to this area. What is the nature of the conditions you say that are serious that are undiagnosed? Why would they remain undiagnosed? Normally, if people exhibit profoundly disturbing symptoms, either they or somebody else identifies those symptoms.

Dr Epstein—The sorts of conditions I am talking about include psychotic illness, major depressive disorders, major anxiety disorders and personality disorders. The reasons why they are not being picked up, I suspect, are multiple, including that some of these people may not present to the health system for treatment. They sometimes get diverted into the criminal justice system. For example, the recent study by Bridges-Webb looking at morbidity in general practice—

Mr KERR—Nothing like 25 per cent of 1.5 per cent of Australians is diverted into the criminal justice system.

Ms MACKLIN—It is only one part.

Dr Epstein—Some people just do not look for treatment. I have treated a number of people who have had long-term depressions that have been present for many years who have never come for treatment. It is partly because of community attitudes towards mental illness.

Dr NELSON—It is like Beverley Raphael's recent work with the NHMRC on depression in young people who are described as antisocial or are not quite right when, in fact, quite often they have serious depression that is not detected.

Dr Epstein—In fact, many adolescents who get involved in drug use are really self-medicating for a depressive illness, and it is seen as a drug problem, not as a psychiatric problem.

Ms MACKLIN—There is the comment that you made before that it is not recognised by GPs, either, in some circumstances.

Dr Epstein—The Bridges-Webb study is most interesting. In this very widely based study, I was fascinated to see that the number of patients who had drug and alcohol related problems who were seen by general practitioners was zero—none. Sorry, that is not the way it is.

CHAIRMAN—Thank you both for appearing before the committee this morning. A draft of your evidence will be sent to you for checking. You are welcome to stay for the rest of the day and tomorrow, if you wish.

[10.41 a.m.]

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

ANDREWS, Dr Paul Victor, Director of Information Technology, National Ageing Research Institute, PO Box 31, Parkville, Victoria 3052

HELME, Professor Robert Darrel, Director, National Ageing Research Institute, PO Box 31, Parkville, Victoria 3052

CHAIRMAN—Welcome, gentlemen. We appreciate your appearance before the committee this morning. Could you please give a brief opening statement to summarise your submission and to focus our questioning. In doing so, could you tell us how the ageing institute is funded.

Prof. Helme—Thank you, Mr Chairman. I have provided a brief document on these comments. The National Ageing Research Institute is a legally independent organisation which is accredited by the NHMRC and is a member of the Australian Association of Medical Research Institutes. It is funded jointly by the health department of Victoria, the western health care network in Melbourne, and is auspiced also by the University of Melbourne.

I should give a perspective of how we came to this area. We represent a fairly narrow focus of interest, and that is the hands-on application of Information Technology in education with health care professionals. It started because I was aware when I came to the position of Professor of Geriatric Medicine at the University of Melbourne that there had, essentially, never been any education in geriatric medicine either at that university or at any other university in the country.

Part of this situation is due to the fact that funding in this area had always been derived from local hospitals and not from DEET, or now DEETYA. Because of limited resources, we put effort into Information Technology education for medical undergraduates. Indeed, I think we are still the only group in the country that has actually published in the *Medical Journal of Australia* an effective outcome to this approach with health care professionals.

More recently, we have become interested in postgraduate and continuing education for health care professionals. To that end, we have been funded for a pilot project by the state government to introduce a clinical decision support system for health care professionals, particularly general practitioners. So that is where we come from.

CHAIRMAN—Thank you, Professor Helme. Could you outline to the committee any results so far of the on-line pilot project you have developed for general practitioners

which includes diagnostic and other information relating to the medical care of the aged.

Prof. Helme—That project is still in a fairly preliminary phase, partly because of a lack of expertise in this area for us to push the project forward. Indeed, I was telling Dr Chris Brook earlier during morning tea that we have recruited an Australian geriatrician to drive that project. He has been at McMaster University and I have recruited him as a senior lecturer to start on 1 May. McMaster is a prominent university in Canada which is very much involved in this area of activity. We have put together a group of people, we have put together people from our own organisation, and we have put together a user group of general practitioners.

CHAIRMAN—Just in Victoria or nationally?

Prof. Helme—In Victoria, both urban and rural.

CHAIRMAN—But not nationally?

Prof. Helme—Not nationally. We have provided them with facilities for accessing our server by providing them with modems and some support through our Information Technology director, Dr Andrews. We also provide clinical support from two geriatricians who are involved in this project—Dr Sam Scherer and Dr Kim Taubman—and this support is basically through e-mail rather than through any other method.

We have produced product related to dementia and to falls, which are two of the common clinical problems of older people. What we have, in essence, is a system where we produce a product; we put it out and they give us feedback and some evaluation of it. We then go through an interactive procedure to improve the quality of the product. We have learned from experience that we need to test products on a variety of audiences before we are prepared to, in our case, put it out for public consumption or to use it for an evaluation that is of a quality to submit for publication.

Mr QUICK—How many GPs are involved in the program?

Prof. Helme—Twelve.

Mr QUICK—How widespread across Victoria—from the South Australian border to the New South Wales border?

Prof. Helme—Yes.

Mr QUICK—Right across?

Dr Andrews—We have one in Mildura, one in Wodonga, one in Castlemaine; we have a representative who was previously in Mortlake and one in Geelong—and otherwise

within metropolitan Melbourne.

CHAIRMAN—Why did you choose GPs and not other health care professionals?

Prof. Helme—In my earlier remarks, I said that it is my view that knowledge of issues relating to the practice of geriatric medicine are not well inculcated in the general practitioners in this country. My first strategy was to educate the medical undergraduates and, indeed, that is what my colleagues around the country are now doing. We have been doing this for approximately five years. This means that there are now residents and registrars in the hospital system. My strategy now is to come at the other end of the problem, to try and address issues related to the practice of geriatric medicine in the community.

Mr QUICK—With the ageing of Australia's population, are we really behind the eight ball? You have obviously set a plan in place that is working reasonably well in Victoria, but what about the other seven-eighths of Australia?

Prof. Helme—I can only go on the communications I have with my colleagues in other states who hold similar positions. I think there is a reasonable consensus amongst us that that is the case. We obviously wear a particular hat.

CHAIRMAN—But you are the National Ageing Research Institute, not the Victorian ageing research institute. Don't you have a wider responsibility than simply a fairly small corner of the country, albeit an important one?

Prof. Helme—This is an ongoing dialogue that I am having with a number of people. The term 'national' was given to the organisation that I came to 10 years ago. In fact, it was given 20 years ago, as it was the first academic organisation of this type in the country. It was actually called the National Research Institute of Gerontology and Geriatric Medicine and it was known around the country as such. I had the temerity, when I incorporated the organisation 2½ years ago, to retain that title knowing that our activities were essentially focused in Victoria. I certainly have an ambition to make it national, but I am the first to say—

CHAIRMAN—So ambition also exists in medicine, not just in politics!

Prof. Helme—As the director, I am the President-elect of the Australian Society for Geriatric Medicine and the deputy director, Dr Anna Howe, is the President-elect of the Australian Association of Gerontology, so we do have some influence over our colleagues, but it does not go much further than that.

CHAIRMAN—Thank you.

Ms MACKLIN—I had the good fortune to see what I assume now is an early

version of the dementia program that you were doing.

Prof. Helme—Yes, we circulated that recently. We produced an interactive computer program for the aged care assessment teams.

Ms MACKLIN—I thought it would be useful for you to describe it because I found it a very useful thing to see in process and people might get some benefit from it.

Prof. Helme—The Commonwealth contracted us to develop an interactive computer learning package for the use of health care professionals in aged care assessment teams, and that has been out to the 124 teams around the country for about three or four months now. It is supported by some papers. The idea was to make a user friendly program that ran for eight or 10 hours but which can be done in quite small modules for health care professionals of all disciplines, who are not familiar with computers, to access the way of thinking, although that is more or less subconscious, but the actual practice of how to make assessments and manage people with dementia who come to the attention of aged care assessment teams, which is one of their prime functions.

The feedback we have had from that has been essentially informal but we have been quite delighted with it to date. Basically, it fashions people into thinking how to make an assessment and what to do about it on the basis of clinical stories. One story is of a male and one is of a female. It is the process of an assessment well before they require residential care, then at the time that residential care is required, and again nearer to death when they are a resident in residential care. We made this available about two weeks ago to the committee.

Ms MACKLIN—I recommend it to other members of the committee. I found it very useful, as a non-medico, to help understand—

Prof. Helme—Could I make a comment about that experience, and this is from the heart. It takes some time and a multi-disciplinary group of people to do this. The quality of that project, of which I am very proud, is no accident. There was a lot of background work done over a number of years that went into getting to that level. We feel we are at that next step of being able to go to clinical decision support systems. Incorporated in that, another issue which has not been thought of very much is the efficiency of the referral process from general practitioner to specialist doctors, something which I picked up on in a study that we are doing in collaboration with the John Hopkins University in Baltimore.

Ms MACKLIN—We do not seem to have it so maybe you could send us another copy.

Prof. Helme—Sure.

Ms MACKLIN—I have a comment to make that follows on from that last

comment of yours. Certainly, in some of the work that I have done in the past it does show that if there are not geriatricians and nurses in the community or other people in the community who have specific ageing qualifications, qualifications to do with looking after the aged, then older people moving through the health system are badly treated and end up with much worse results.

However, given that we are talking about technology today rather than other methods of improving the quality of care, I would be interested in what other examples you might have of work you are doing from a technological point of view that facilitates that process through the health system of someone who has a fall, who may only see a GP, and then be put into an ordinary hospital without seeing a geriatrician, without having any access to a nurse who has any knowledge of caring for the aged.

Prof. Helme—I wish I could report a whole lot of other activities but, in essence, we haven't those activities. We are limited by the amount of resources that we can put into this sort of exercise. Essentially, the three I have outlined—interactive computer learning packages, the clinical decision support systems and the e-mail communication—are the ones that we use. These days everyone is essentially using computerised projection facilities to assist their teaching programs. It is very interesting that the other day I had a request for the notes of a lecture that I am giving next week—the first year medical students required it on the Web rather than by any other format.

Mr QUICK—In relation to the costs and benefits analysis of all these pilots, can you give us a brief outline of the model that you have developed? Obviously, if you keep people out of nursing homes and hostels, there is an obvious benefit not only financially but also for the health and wellbeing of that aging person and also the family in associated costs. Can you quantify that? Is that part of your pilot?

Prof. Helme—I think we can quantify that, but it does need quite a lot of resources to be able to do that. Clearly, it is a matter of evaluating a product that you put out, and that can be done by a variety of means. Then there are the people who use that product, and then what you are more interested in—as you are alluding to—is evaluation of the end person, if you like, who, to us, is the older person in the community. There is a variety of criteria that we can look at which particularly relate to function and remaining residence in the community. One can also look at some health economics around those issues.

We do run a multi-disciplinary organisation. It is not that big, although I wish it were. I said that we had just recruited a person, with more experience than any other in the country, to run our public health division. I am very hopeful that we will be able to expand and collaborate more in those areas, but it is extremely difficult. We dabbled in different areas, not with this project, in other projects. However, the answer to your question is: with great difficulty.

Mr QUICK—You are operating within the jurisdiction of state and Commonwealth health departments, and also within local government areas as well. Yours is a small institute, which operates with real fervour. What are the drawbacks? You obviously have a vision but, as I say, you have got state and Commonwealth health departments and you are working, in some cases, across areas—state boundaries—that are really arbitrary. You are having to develop that sort of cooperation, and also you have got, in some cases, really strong local government areas. I am talking about rural and remote areas. For example, my mother lives 300 kilometres away, almost near the South Australian and Victorian border. You have to get that group of communities to have an aged care strategy to enable the people, who are basically from farming communities, to stay in that area, and then there are the cost benefits of that. Given that, it must be a really daunting project that you are undertaking.

Prof. Helme—Yes. Some of you may know Mary Murnane, who is the senior secretary of the aged care division, and Jane Halton, who is her deputy. They are both visiting on Friday to discuss these issues with me. We need an ongoing dialogue to actually undertake these evaluations. I have been very critical of some people, particularly those who design coordinated care projects and who do not put evaluation in place. In this state, there are some post-acute care projects, which are coming up for tender for evaluation next week. As I said earlier, they have to be evaluated from the beginning. You come to people like us to tender for that process at the time those projects are starting. There is a lot of mismatch of information in this country.

Mr QUICK—So how do we draw all the threads together? Whose responsibility is it? Should it be the Commonwealth's? Should it say, 'We provide most of the money. We demand that this should happen.'?

Prof. Helme—This is getting off the point, but it is an absolute travesty that the issues of Commonwealth-state relations on health have not been resolved. I think that is to the disadvantage of the group of patients that I am the advocate for. I feel very strongly about that.

CHAIRMAN—Whose fault is it?

Prof. Helme—I realise that I am speaking in front of this microphone. I really am unsure. I talk with people at different levels and they give me different answers.

Mr FORREST—I would like to get the benefit of your experience on standards. I notice that part of your project is designed to coordinate the drug management of the elderly and so on. As a committee, we have been inundated with G7s, ISDNs, ICG-9s and all sorts of things. Are you happy with the progress being achieved towards standardisation of the names of drugs, generic qualities and so forth?

Prof. Helme—I spend little time thinking about this particular issue. I think that

the best example we have is the ongoing discussion of—and I forget the exact title but it is the ACCC—the committee looking at DRGs in this country, trying to establish them for not only acute care but in extended care circumstances. These are essentially think-tanks of experts who have spent a lot of time and effort trying to build this. It is very important, obviously, because it is underwriting the methods by which we are funding health care in this country at the moment—in most states, anyway. My only comment is that anything done in this area must link quite closely to those organisations that already have that expertise and have already thought about it a great deal. I cannot really comment on what similar structures are in place for pharmaceuticals. I really do not know.

Mr FORREST—At least you are not trying to reinvent your own wheel.

Prof. Helme—I know my place. Can I make a comment on one other issue in case you do not come to it, although you probably will. I currently have at the institute, on study leave, the director of the department of rehabilitation of health care for the People's Republic of China, whom I have met on several previous occasions, particularly at a meeting with the minister for ageing in China. The minister took me to lunch in a wonderful restaurant that I would never be able to afford, but then grilled me for two hours through an interpreter. The issues of the ageing population in China are quite dramatic. I have been trying to think of ways in which we can interrelate with that country—and you can apply this to any country in regard to this whole area. This fellow is here to work with Dr Andrews on Information Technology.

This whole issue of trying to be able to develop a product and market it in an Asian country is extremely complex and difficult and something that we cannot resolve alone. At least this is one method for us to try and come to grips with as health care professionals to see what the potential is. But it needs a lot of players from other areas of expertise to be able to do it. My point is that I do not think you should underestimate the difficulties in getting product that is useful for these countries. In fact, we cannot even find product for our own area from the US that is essentially applicable to what we do. So to try and do it for another culture, another language, another health care system is extraordinarily difficult.

Mr ALLAN MORRIS—Professor Helme, this question is on an entirely different tack. We have seen the growth in recent years of home based communication systems like VitalCall. We have seen those growing to the stage where a carer will key in that they have been present and so on. The logical extension of those would be to use a health monitoring system. In other words, push a button and get a blood pressure test or other things. That would be the logical extension where telemedicine extends into an aged person's home or the home of a person with disabilities, where there was more than simply an alert system for saying we have a problem.

Prof. Helme—Yes, functional monitoring.

Mr ALLAN MORRIS—Yes, some form of monitoring. But that would probably require a cultural shift between those providers in the medical profession, because they seem to be quite separate entities—commercially based information systems as opposed to medically based health systems. Do you have any thoughts or observations as to how the two might come together?

Prof. Helme—The obvious common sense statement is that doctors and companies like to dabble in areas that largely they do not know anything about. If they work together, you would have an environment where they might make some progress in that regard. From our own perspective, we found it quite difficult to get a liaison with commercial companies. This is more the problem but perhaps I am so naive that I do not realise there is a tremendous amount of that going on.

Mr ALLAN MORRIS—You have your coordinated care trials going on. Part of those are, as you mentioned, post-acute and people are being sent home. In theory, they are being monitored. People are calling to help provide services of nursing and so on. That seems to be linked back to the hospital they came from. It would seem to be the ideal opportunity when all those things are happening for people who are professional in a more broader sense than you appear to be to try to act as a catalyst.

Prof. Helme—A geriatrician is a consultant physician with a chip on both shoulders.

Mr ALLAN MORRIS—At least.

Prof. Helme—There are relatively few in this country as it turns out. We have not trained an awful lot of them compared to, say, the United Kingdom, which is essentially our gold standard. They tend to run and coordinate systems as a distance. Unfortunately, they have not been trained in business management, which is another chip on my shoulder. They run multidisciplinary teams, they look after people in multi levels of care and they interact with the people out there. They run things at a distance. They have a mind-set which, in fact, is encouraging to utilise this sort of distance facility and remain confident that they can do so.

There are relatively few of them. The training for this area is essentially non-existent. It is a potential that is there. I think they would grasp it, but to make it work nationwide would require quite an investment.

Mr ALLAN MORRIS—There is a system operating in Geelong, for example, where they are using a community based organisation which provides the technology and I think it maintains the database, which seems to be a community base linked in with the local hospital. Are you aware of that one?

Prof. Helme—No, I am more familiar with the system in Ballarat.

Mr ALLAN MORRIS—It could be Ballarat that I am thinking of. It seems to be an ideal model to add to that next layer, which is actually a monitoring system. At the moment telemedicine seems to be the problem simply of specialist to specialist or doctor to doctor when there is no reason why it cannot be—

Prof. Helme—Yes, doctor to pharmacist or pharmacist to patient.

Mr ALLAN MORRIS—Yes. I just do not see much movement in that area. This seems to be the ideal way to go about it. Your organisation and your people seem to be the ones who are more likely to be a catalyst for it.

Prof. Helme—Some of my people are up in Ballarat. These country centres are obviously ideal because they have a circumscribed population. Although we have patches in the city where we are responsible for aged care, there tends to be some drift at the periphery. The interaction at the interface with local government authorities is more difficult because somebody has designed a system where we overlap local government authorities. It just was not designed very well. So Ballarat, Geelong and the other centres around the country are set up such that they are good for piloting these sorts of things. I agree with you.

The problem always is that they do not necessarily have academic strengths which I think are essential to underwriting the evaluation and, indeed, the study zones are part of that. I think that is a real problem. That can be addressed in all sorts of ways, but I do not think anyone has really had the oomph to actually do it.

Mr FORREST—What is the feedback from all of those people in terms of their satisfaction with the way that technology or the infrastructure has performed? I am especially interested in the chap in Mildura. Is he getting adequate performance from the system?

Prof. Helme—Paul can answer this, but basically we have to gee them up. That is one thing you should take away. They do not come at it easily.

Dr Andrews—In our recruitment strategy we just canvassed for GPs with interest and these 12 elected to join in. They came down to Melbourne to have a chat with us about what we planned on doing and then we intended to maintain contacts electronically or by telephone or whatever. There was a lot of enthusiasm initially, but we have found during the project that, for whatever reason, their involvement has been less than we had wished for. The chap in Mildura is a case in point. He had very little experience with Information Technology. He had only just bought himself a notebook computer. So I am sure part of his difficulty is using the technology.

Dr NELSON—They probably get sick of waiting for the thing to download their information.

Dr Andrews—Some of the comments have related to those issues, because we are delivering via the Internet. If they are working on the desktop, they press a button and they want the answer almost straight away. If you have to make an Internet connection to get into somewhere and then wait a number of seconds or more for each bit of information to arrive, they found that to be less than they would wish for. So one of the comments we have had is that the speed of the system has been too slow.

Prof. Helme—Though we have been reassured by our discussions, particularly with representatives of Optus, that that technology is catching up with us, and I am sure that you are aware of all that.

Mr FORREST—We will have to check up on them a bit, I am sure.

Mr QUICK—The new John Flynn scholarships are promoting doctors, at least getting experience of rural and remote areas. Do you hope to convince a few of those people, the scholarship winners, to take on board your vision? They seem to be the people who are aware of modern technology, unlike some of the GPs who have been out there and are scared stiff of it.

Prof. Helme—Yes. The minister actually reminded me that he was a student in one of my tutorials at Monash some time ago.

CHAIRMAN—Was he a good student?

Prof. Helme—I cannot remember him. I do not know. I have yet to really settle down and think about that. I think there is a lot of potential. The design of our particular program for undergraduates is very simple—give them a warm inner glow. We want them to just get a little bit about the knowledge, particularly the attitudes. We actually measure attitudes of students to older people, and we have normal older people come in and give them curry. So they are really mixing it with older people. They do not pick up much in the way of skills, but what we are trying to do is make them enthused about this area of medicine which has always been regarded as being second rate. We hope that we will get some of those students to go that way, but proof of the pudding is in the eating.

CHAIRMAN—Thank you very much for appearing before the committee this morning. We appreciate your time, and we are very impressed with what you had to say. We will send you out a draft of what you have said for you to check to make sure the evidence is correct. If you could see *Hansard* before you go, we would very much appreciate it, in case they might need some additional particulars.

[11.13 a.m.]

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

GRAHAM, Dr Ian Scott, Fellow, Royal Australian College of Medical Administrators, 35 Drummond Street, Carlton, Victoria 3053

CHAIRMAN—In a brief opening statement of not more than two minutes, would you like to summarise some of the key aspects of the submission which we have already received and circulated to all members?

Dr Graham—Yes. Thank you for the opportunity to speak to this submission. The submission looked initially at some of the recent trends in health information management and quoted Friedman in 1990 about some of the developments in health information management—the move away from mainframe computer systems, the need for decision support, the recognition of databases as an asset. All of these we see in health. We also in fact see them in many other industries. You could remove the word hospital and put industry or commerce in its place.

We then addressed the question, why is the health industry a little behind the rest of the world in Information Technology? Some have said it is due to a lack of funding; some due to a lack of expertise. We contend that in fact the issue is one of complexity and a lack of understanding of the very special nature of clinical information systems.

The submission goes on to talk about the typical structure of a management information system that appears in textbooks, the pyramid of transactional systems upon which you have operational management and strategic systems. We contend that this is not a good model for clinical information systems and that in clinical systems they could best be represented by an inverted pyramid that recognises simple clinical data—small amounts of clinical data elicited from the patient—broadening into information, which is where that data is structured and consolidated and aids decision making, and at the apex of the inverted pyramid is a huge body of clinical knowledge. Integrating that knowledge into our day-to-day practice is one of the great challenges in health Information Technology.

The submission went on to look at some of the emerging technologies that we have seen and the pilot projects we have heard of around the country that are looking at various technologies. I guess there is some importance in telecommunications, and its application in Telemedicine is stressed in the document. But the importance of integration of these various technologies into a consolidated clinical information system is also vitally important.

Finally, we looked very briefly at the issue of standards for information management. The simple requirements of functionality, timeliness, accessibility, integrity

and security of information are absolutely vital. Whatever structures and systems we put in place to manage them, we need to make sure that those standards are maintained.

CHAIRMAN—Are we doing that?

Dr Graham—Yes, we are doing reasonably well.

CHAIRMAN—There have been a lot of Telemedicine pilot projects in the country and the evidence coming before the committee appears to be that Telemedicine is certainly an advantage to the Australian health system. Are we perhaps being unwise in proceeding with more pilots all the time, rather than proceeding to implement Telemedicine as a permanent feature of the Australian health care system?

Dr Graham—Yes, there is a problem with pilot projects and the way we have been doing them—whether it be in Telemedicine or any other area of health Information Technology—

CHAIRMAN—Pilot fatigue.

Dr Graham—Indeed—and we have already heard this morning of the difficulty of evaluating these projects. We are looking at isolated technologies and trying to evaluate those isolated technologies. I do not believe that we can do that effectively. We need to embed the technology in the system, have it operating in the normal day-to-day clinical practice within the system, and evaluate it there. That is when we will find out if it really is of benefit or just a gimmick.

CHAIRMAN—Are we doing that?

Dr Graham—No, I do not think we are doing it.

CHAIRMAN—Why not?

Dr Graham—One of the difficulties, which was alluded to by a previous speaker, is evaluating social change and benefits in a complex metropolitan environment. I work in Ballarat and in that sort of environment we do have the opportunity to look at the whole population; to look at the effect of this technology on the whole of practice in Ballarat, whether it be hospital practice, general practice, specialist practice or community practice. If we develop system-wide piloting, we do actually have the opportunity to evaluate it properly.

CHAIRMAN—Do you think the federal system may be impacting adversely on sharing of information from pilots and that people tend to be operating as islands rather than cooperating, as indeed they should if we are to get the maximum use as a nation from the pilot projects that have already been done?

Dr Graham—The confused systems of funding do tend to isolate practice and practitioners in dealing with the general practitioners in our town. Their funding coming through a Commonwealth and divisional structure and our hospital funding coming through the state system does create artificial separations and problems of interfacing in clinical practice.

CHAIRMAN—Do you think the absence of an item in the medical benefits schedule is retarding the use of Telemedicine?

Dr Graham—It is one of the elements that is retarding it. It is one that could be overcome. I do not think it is the only thing that is holding back Telemedicine and improvements in clinical practice. But, sure, it is an issue.

CHAIRMAN—If such an item were to be included, what safeguards would you see as being necessary?

Dr Graham—I do not think we are in fact talking about just one item.

CHAIRMAN—Well if it was to be included?

Dr Graham—It really is complex. In teleradiology, we would require an item or mechanism for accounting for reporting on an X-ray, for the input of knowledge into that clinical process. Equally, we may need to look for an item for a consultation over the telephone, with simple telephonic technology. It is going to be quite a complex thing to move away from only remunerating a face-to-face, hands-on consultation to remunerating any sort of consultation over any form of telecommunications or Information Technology.

Mr FORREST—Do you think it might be better to fund the outcome, rather than each individual step in creating the outcome?

Dr Graham—That may indeed be a better way to do it. I guess the sort of program funding that we have seen through the division of general practice initiatives is approaching it from that other direction, and may well be the way to go.

Ms MACKLIN—Is that the only sort of model that you have in mind that might be different from fee for service?

Dr Graham—There are shades between those extremes. For example, we have new systems implemented in Victoria for the remuneration of our hospital doctors that, rather than remunerating on a fee-for-service basis, look at the actual hours they put in, whether it be in direct clinical contact, meetings or other forms of consultation. Maybe a variation on that could be applied to at least the hospital end of a Telemedicine consultation. Perhaps we could develop that.

Ms MACKLIN—Given that particularly in some of the rural and remote areas you have a very defined population, and you do not have a lot of choice about which doctor you are going to go to either, more of a budget holder or any of those sorts of models could work for the specialist services—not necessarily for the whole of the doctor's practice, but for these things. Do you think that would work?

Dr Graham—Yes. Although, again, we have to be very careful about treating any of these technologies in isolation. They must be wrapped into the clinical practice situation. It is not just the remote situations we are talking about. When people talk to me about Telemedicine and the desirability of being able to communicate from Ballarat to Patchewollock, or wherever, in the Western District, I point out that that is certainly important, but that of equivalent clinical importance is communicating from the ward at Ballarat Health Services to the general practice in the next street. The principles are the same: it has to be embedded into the practice of the general practitioner next door, of the specialist in the hospital, of the community practitioner or the visiting practitioner in Patchewollock.

Mr QUICK—Following on from that, we hear that 12 to 14 per cent of GPs are up to date and use the thing on a regular basis. What is the case in Ballarat? Is there just one pilot operating there with Information Technology or are there several? How about the hospitals? You alluded to the fact that Ballarat Base Hospital—

Dr Graham—We are developing a wider program in Ballarat that embraces not only the hospitals, but the local divisions of general practice, the community practitioners and, indeed, the patients themselves in looking at these technologies. That is in its very formative stages, but we are developing that further. There are 80 general practitioners within 30 kilometres of Ballarat.

CHAIRMAN—How many?

Dr Graham—Eighty.

CHAIRMAN—That is a rural area well served.

Dr Graham—It is well served. Probably five per cent of those have computer systems actually embedded in their clinical practice. Last year we ran a small project evaluating the use of facsimile technology in Ballarat. It was a very simple project. When a patient came in as an emergency patient to the casualty area of the hospital and was admitted, we generated a facsimile notification for their general practitioner saying simply that they had been admitted to hospital with this diagnosis. It was a very simple project, but we thoroughly evaluated that project in terms of its benefit to the general practitioners and benefit to the patients.

We also looked at some of the issues of confidentiality. It was interesting. We built

into that process a section for obtaining the patient's consent to notify the GP of that admission and, in fact, about four per cent of patients did not want their general practitioner notified about their admission to hospital. We tend to assume that the GPs should always receive a discharge summary, for example. Perhaps we are making a rash assumption there, that the patients do not necessarily want that level of communication.

CHAIRMAN—Why wouldn't they?

Ms MACKLIN—The vast majority obviously did.

Dr Graham—The vast majority did, yes, but some were very sensitive. A young patient admitted with a drug overdose, for example, might not have wanted that.

Mr ALLAN MORRIS—Or STD?

Dr Graham—Yes.

Mr QUICK—Whose responsibility should it be to encourage the other 95 per cent to get involved in, obviously, what is operating now? The national figures of 12 per cent to 14 per cent are terrible figures but five per cent—

Dr Graham—If we, the managers who are running the health care system in Ballarat, and the vendors who are providing these computer systems, can get our acts together and produce some systems that do recognise that hospitals and health professionals are knowledge processors, are dealing with knowledge—the sort of things I talked about before—and offer some products that will actually improve clinical practise in those general practices, they will rush to buy the technology and put it into their practises.

CHAIRMAN—Dr Nelson reminds me that we have the Melbourne division of general practice coming in this afternoon so some of these questions could be asked then.

Ms MACKLIN—In your evaluation was there any evidence that patient care did improve as a result of the fax?

Dr Graham—Yes, there were improvements. For example, in Ballarat the GPs usually visit their patients when they are in hospital. So by finding out not two weeks later but at the time that they had come in, they could come in and be involved in the management of that patient and contribute to the management of that patient in hospital.

Ms MACKLIN—I understand the theory, but did it improve their health?

Dr Graham—Yes, it did, and the evaluation—

Ms MACKLIN—In what way?

Dr Graham—From the feedback from the GPs, they felt that things had improved.

Mr ALLAN MORRIS—I have three different questions. Firstly, in cataract surgery, for example, new medical technology has dramatically reduced both the hospital time and the surgery time but the cost stays the same. So the whole question as to how you cost it is quite problematic because telemedicine offers potential savings for the doctor in terms of overheads and time and a lot of other issues yet if the costs remain the same as for face-to-face interviews, that could be difficult. Have you got a comment on that?

Dr Graham—Yes, indeed. Our evaluation strategy has to be thorough enough to look at costs and practice and outcome in using that technology. Again, I will use a Ballarat example. We are using telepsychiatry routinely in some of our regional psychiatry work. We are also putting a psychiatrist in a car and sending him up to Horsham for the night to run clinics. So we are running in parallel the two systems and we can cost them down to the last dollar for petrol or the last dollar of the ISD line that we are renting.

Mr ALLAN MORRIS—By putting it on the Medicare schedule, the impression that people have given us so far is that we should be able to get a Medicare schedule for a teleconference as if it were a normal consultation. That seems to me to be a fairly dangerous step in the sense that there is no evaluation as to what is involved in that teleconference.

Dr Graham—Yes. I would rather evaluate it by looking at the costs locally. Shifting the cost of part of it on to the Commonwealth is not a saving overall. I think it is better to do a local analysis and local review.

Mr ALLAN MORRIS—So the organisation is not arguing for a straight transfer on to the Medicare schedule of, say, a teleconsultation, at whatever the schedule fee might be, as if it were a face-to-face consultation?

Dr Graham—No.

Mr ALLAN MORRIS—The second part I wanted to raise with you is the question of ownership of records. I watched an interview with a doctor the other night. She said that because she wrote down what her views were about a person's condition, therefore it was her property. I was wondering about the mechanic who writes down his view of my car when he gets paid and whether that belongs to him as well.

We are introducing into the equation of patient servicing an extra element which is a multiplicity of consultations and data flows. As one who believes that the patient has a right to ownership of that, I see this issue as complicating that whole area in terms of jurisdiction as to who actually owns the data. Is it the teleconferencer or, if you like, the

person at the end of the system, the person at the front end who is actually talking to the person, someone in between or the patient?

Dr Graham—These are very complex issues which I would not for a moment pretend to have the answer to. I don't think, though, that they should hold up the implementation of useful health information and technology. If the technologies can be developed and put into place, these issues will come up. They will need to be addressed as part of the implementation of the technology, and they will be.

Mr ALLAN MORRIS—I would argue that they should be brought up as part of the design, not of the implementation.

Dr Graham—Yes. Some of them can be resolved at that point but many will not. Many can only be resolved possibly down the line in a court case, in a legal situation. There is medical record imaging and the question of whether that can be admitted as evidence. Some of those issues will only really be resolved when they are tested in the court.

Mr ALLAN MORRIS—Yes, there is a great danger that we will plough on—technologically driven—and suddenly discover that legally it cannot be used, anyhow. The person could be liable for negligence. This issue should be at the front end of the design and not at the back end. I am a little concerned that we are not seeing enough evidence of that coming to the fore now when there is an opportunity to incorporate good practice into the design process rather than wait until afterwards.

Dr Graham—I think those elements of good design are there. Again, coming back to the issue of medical record imaging and scanning images of the paper medical record, we need to build into those systems the audit trails, the checks, the back-ups and so forth at the front end. You are quite correct. If we cover as many of those things as possible, then hopefully there will not be too many issues that need to be resolved down at the other end in a legal situation and a court situation.

Mr ALLAN MORRIS—There could be, couldn't there?

Dr Graham—No doubt the lawyers will think of a few.

Mr ALLAN MORRIS—What is concerning me is that a medical practitioner or an insurance company could end up being liable, actually in good faith, because we have not taken into account the jurisdictional questions that seem to be pretty apparent at the start.

Dr Graham—That is why we put the question of consent on this simple form that was being sent off from the patient. That was an example of a system that was implemented at the start to try to minimise or avoid problems.

Mr ALLAN MORRIS—I am raising it with you because I think medical administration is the area that probably should be addressing some of these questions.

Dr Graham—Yes. From the point of view of medical administration, we have been presiding over the paper medical record systems for many years. In fact, I think the paper medical record actually represents a very well integrated system that is functioning quite well. Just because we are moving onto Information Technology platforms and so forth, it does not absolve us from the responsibility to make sure that the confidentiality, privacy and integrity of the data is maintained in these new systems.

Mr ALLAN MORRIS—The third part of the question is that of standards. I am thinking in a more complex way—a bit more detailed than simple commonsense—about the actual protocols. We have international standards for the data storage of medical terminology and so on. There is also a question about storage techniques. We are likely to have an abundance of computer based organisations competing with different systems which are incompatible, and almost deliberately so. We may have a multiplicity of systems in hospitals around the countryside whose systems are not interfaceable. How far advanced are we, at a national level, in ensuring that not only is medical record storage at international standards, in the sense of definitional questions, but that protocols on data transfer and on database interfaceability are also at international standards?

Dr Graham—I think Australia is doing quite well in that area. I sit on the Standards Australia IT-14 Committee that is looking at standards in health Information Technology. It produced a standard on computer based medical information systems, clinical information systems, last year. It is an excellent world class standard—not only is it good theoretically but also it is good practically. It is a document which I can walk into Ballarat health services with and implement in the IT department there. That is a useful standard in my perspective.

Mr ALLAN MORRIS—Is that being made mandatory for state health departments? Could it be made mandatory?

Dr Graham—I do not think it is actually mandatory. As with some other standards, compliance with that standard would be seen as something that is required by the Australian Council on Health Care Standards for accreditation of a hospital. That standard would be quoted within the guidelines from ACHCS.

Mr ALLAN MORRIS—I am thinking of the transfer of a person from Queensland to Victoria or Victoria to Western Australian. Any complications with paper records is easier but with computer records it is much harder. There is a real danger that we will end up garbling it between the two systems.

Dr Graham—The problem with the patient who moves from Queensland to

Victoria is grossly overstated. We have so many more problems with the patient who moves from the ward at my hospital to the general practice across the road that we need to address first.

Mr ALLAN MORRIS—I say that because we find that a state may insist on standards in that state, and they can be absolutely adamant that it does not have to conform to any other state. A disaster can occur simply because states have different sets of standards.

Dr Graham—There are communication standards being developed and implemented. The information could be stored in one format in the Victorian practice and in a different format in Queensland practice but there is a standard communication protocol that will see that information transferred.

Mr ALLAN MORRIS—It can be converted but only if that standard is being enforced at national levels. That is a question, is it?

Dr Graham—They are being developed at the national level.

Mr ALLAN MORRIS—But not being enforced?

Dr Graham—I do not think they are being enforced yet?

Mr ALLAN MORRIS—Let us say we recommend in favour of the recognition of telemedicine and teleconferencing, all those things, as a justifiable expenditure—in other words, a doctor or hospital could be paid for it. You would argue that one of the provisos would be only if they can conform to those national standards.

Dr Graham—Yes. It is not just the health departments that have to conform to those standards. The vendors must recognise the—

Mr ALLAN MORRIS—The person being paid to administer the service via telemedicine. One of the quid pro quo's could be, that that would only be payable if they were in fact conforming with the national standards.

Dr Graham—Yes. To ensure that they purchased a piece of equipment that did in fact comply with those standards.

Mr ALLAN MORRIS—Your organisation would support that point of view?

Dr Graham—Certainly.

Ms ELLIS—Mr Graham, the submission suggests that if Australia is to become a regional or international leader in the development and marketing of health information

Technology it will require regional and national forums to promote collaboration between the diversity of health professionals. This is currently done through the Health Informatics Society of Australia. I think that is on page 5. The point was made several times to this committee that Australia should first get its house in order with regard to Information Technology and then vigorously market its expertise in niche areas of health care in the region. It has also been suggested that an enormous injection of money is necessary if Australia is to compete with some of the other countries in the region. Could you comment on that view and where you think Australia now stands with marketable expertise in health Information Technology in comparison with some of the countries in the region, or with USA or with parts of Europe?

Dr Graham—We have achieved a great deal over the last few years through the Health Informatics Society of Australia in bringing together health informatics professionals, whether they be doctors, nurses, vendors or academics from around this country to discuss and develop health Information Technology. I am pleased to say that it was from a meeting in the rooms of the College of Medical Administrators in 1992 that we first got some of these people together. I convened the Health Informatics Society in 1993. It is now recognised as the Australian body for health informatics professionals and is officially represented in the international forums as the representative body of Australia. That is an ideal forum for developing these technologies—for looking at standards and for educating people about health Information Technology.

In terms of exporting, I do not think that we are going to be exporting a great deal of hardware or software in the very near future. I think we do have the opportunity to export what I would call ‘careware’. If we build good systems, good hardware and a good solid infrastructure, we can put on top of that software that runs effectively in clinical practice. We will then build on top of that the protocols that organise our management of patients: the protocol that takes a patient through my hospital from earliest referral with osteoarthritis through a hip replacement, rehabilitation and back into their home environment. Those protocols at the moment sit on an eight-page document that folds out on the desk. That could be put into an effective computer system and implemented through that technology. I think we could sell those protocols outside Australia to be implemented on the technology that the United States, Japan and other places have been producing very well for 10 or 15 years.

Mr FORREST—Your submission makes an interesting point on page 6 which refers to some professions which will become the blacksmiths, I suppose, of the early 20th century. With the digital imaging changing towards what we saw yesterday which was a tremendous example of a 3-D image of the brain—extracting the actual shape of tumours so that the pre-surgery investigation can be done to minimise the trauma—it is magnificent stuff. Have you, as an administrator, picked up any threats this creates to some professions who are going to have to change their ways, particularly radiologists, for example? Is this acting as a deterrent to enthusiasm to embrace IT?

Prof. Helme—I do not think it is acting as a deterrent. But, yes, I think a lot of professions, including the medical profession, will need to look at their practice in the context of new Information Technology. We talk about using Information Technology in business to allow us business process redesign and improvement in the way we do business. I would like to think that properly implemented, innovative Information Technology would allow us to do a bit of clinical process redesign, and perhaps challenge some of the ways of clinical practice that have been in place for the last five, six or 700 years. I think there are real opportunities there, and I would hope that, with the right technology, the professions will embrace those opportunities and run with them.

Mr FORREST—Do you think we as a community need to bring people along, though—rather than have resistance, to have a preparedness to change the way we do things? I do not think that that has happened.

Dr Graham—I must admit that in the health care system I do not see a lot of resistance. There are practitioners all around Ballarat screaming out for some technology that will allow them to improve their practice. I do not see blocks of resistance in the health care system at the moment. The only blocks at the moment, I think, are the technology and the understanding of clinical practice and the understanding of the health care system. We need to improve those things so that the products are better and more effective.

Mr FORREST—Won't radiologists, for example, though, have to consider some retraining to be into better technology—such as digital imaging rather than X-rays—and move away from that, and is that happening?

Dr Graham—That is happening. It is part of their practice and training now.

Mr ALLAN MORRIS—But the more interesting battle has been the turf war.

Dr Graham—The turf—oh, indeed.

Mr ALLAN MORRIS—As to who is responsible for this new technology, whether it is nuclear medicine or whether it is radiology. That has been the much more fascinating battle, would you not think?

Dr Graham—Yes, and the whole area of patient access to these—

Mr ALLAN MORRIS—Who looks after ultrasound, is it really radiology or something else?

Dr Graham—Exactly, and the whole issue of patient access to these systems, which you alluded to before, through the internet, through telecommunications. There are far more opportunities now with this technology for the patient to be an active participant

in the process.

Mr FORREST—Instead of keeping your tonsils in a jar, you have got to keep a picture of them on the desk.

CHAIRMAN—Thank you very much, Dr Graham, for appearing before us. A draft of evidence will be sent to you for checking. Before you leave, could you just see the lady from *Hansard* and she will let you know if she needs any additional information from you.

[11.48 a.m.]

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

CESNIK, Associate Professor Branko, Director, Centre of Medical Informatics, Monash University, Peninsula Campus, Frankston, Victoria 3199

CHAIRMAN—Our apologies for holding you up this morning. Thank you very much for appearing before us. We have received your submission and we have all read it. I was wondering if you would like to give us a couple of minutes, setting out some of the key elements of your submission, to assist us in obtaining further information from you subsequently.

Prof. Cesnik—Certainly. Firstly, I thank you for the opportunity. As much as my time has been used, I think yours is being used most usefully doing this. Our position at the Centre of Medical Informatics in responding to this followed very much the terms of reference offered to us, which is merely another framework for looking at information technologies in health care. Many could have been used. But I will stick to them as such in a brief summary.

There has been a plethora of pilot projects, and maybe yes, pilot studies are not the way to go; they should perhaps become more operational. The information concerning them around Australia is not well shared. This is often due to internal instrumentalities in government, academic enterprises, business, a whole range of industries that hold on to such information rather than share it. It is a common characteristic.

The costs and benefits is a question that is faced internationally. No-one anywhere in the world to date has proved a generic cost benefit to IT in health. There are numerous examples. They do not scale up well to a general statement, so individual projects can be shown to be important, they can be shown to benefit, and the question to be answered may be that the cost benefit model is wrong. Rather than a merely economic one, there are other factors.

In Australia, it brings in unique aspects such as what do we do when we deal with Aboriginal and Torres Strait Islanders with Information Technology, and what could possibly be a cost benefit model working there that would be equally transportable into metropolitan areas.

Ethical issues are much talked about in this area, but in fact are probably not as much of a problem as people think. The documents that exist to describe them are complete, comprehensive and, in my opinion, may well be excessive in the detail that they insist upon. We practice less levels of confidentiality in many other areas.

Standards and coding are critical and, for this committee's viewpoint, are perhaps the most effective thing that can be done at a high level of government. I do not see distinct project operational activity emerging from Canberra. But direction as to how it should occur and under what guidance is, I think, lacking.

In terms of our operation in the region, in Asia-Pacific, I am president-elect of the Asia-Pacific association and very involved regionally and internationally. There are large potentials, but they fall into who we are as Australia, what we can market, what we are good at, what we are bad at and what is highly feasible in the short term, if not medium term. The rest of the regional countries are doing exactly the same thing as you are trying to achieve. They are, in fact, investing more.

For wider development in costs, you enter into equity of access as an issue. Technologies tend to create riches and poors, greater than they in fact solve them if you are not careful. That is certainly true in a lot of countries, and America is not a bad model.

I will end this little preamble with some solutions that I see available if problems exist. A clearer national direction in this area—perhaps the mandating standards, although that introduces its own problem, rather than just suggesting them. There is likely to exist the need for special consortia, such as those dealing with Aboriginal and Torres Strait Islander issues in the rural sector. Obviously, through my passion for a centre of medical informatics which focuses on the discipline rather than a service, I think there should be such a national centre. I think agencies such as NH&MRC have very little recognition of Information Technology as an issue itself. It tends to fall under the banner of other areas of health care. So it is very difficult to form cohesive activity specifically related to IT; rather it tends to be the poor child of the main clinical focus, which may be the wrong way round. I welcome your inquiry about my own submission and those points.

CHAIRMAN—I see that medical informatics is a compulsory subject for medical degrees at Monash. I understand some other universities are following suit; presumably there are some which are not. What proportion of Australian universities would be doing something similar?

Prof. Cesnik—As far as I am currently aware, as a pass-fail subject that you have to sit a supplementary exam in, Monash is the only one doing it. Newcastle has to an extent, Flinders has to an extent, Sydney is introducing it but more as part of their general curricula, and in Queensland there is distinct focus on it in their new curricula. But it is not formalised in any other universities that I am aware of.

CHAIRMAN—Briefly what areas do you cover with it?

Prof. Cesnik—We cover introduction to what is medical informatics as a field and discipline. We look at what are current technologies. Many years ago, for example, we

taught students how to use word processors. Our own study and evaluation show that that is completely unnecessary; they are coming out of secondary school well equipped. We teach them about information systems.

CHAIRMAN—It is nice to be coming out of secondary school equipped with something.

Prof. Cesnik—They are a self-selecting group because they are going into medical school, and they do come from upper socio-economic groups generally and they do tend to have computers at home. But that is not true, obviously, of all school kids. But it is true often of the medical students.

We get them to become comfortable with the technologies and distinctly create things, such as web sites, themselves. A good example is a public health web site run at Monash by students, the top five per cent, which attracted them the Internet award last year. That is now an ongoing site and is of high repute.

CHAIRMAN—So you would expect that in future years your graduates would use computers substantially more than today's practitioners, particularly for clinical in addition to administrative purposes?

Prof. Cesnik—We objectively know that they do. Newcastle, through Dr Malcolm Ireland, studied this. The up-take or use of technologies by general practitioners is slightly higher in Monash and Newcastle graduates than it is from other medical schools.

CHAIRMAN—Only slightly higher?

Prof. Cesnik—Only slightly, but then again I have only been doing this with my students for five or six years. There are more graduated GPs out there than the ones I have been responsible for. The same is true of Newcastle. We believe the effect will increase.

CHAIRMAN—How do we move from all these pilots into more permanent implementation in telemedicine?

Prof. Cesnik—Partially by the creation of a national focus, which is absent; breaking down internal governmental barriers about how they are invested in; being more realistic about what are the evaluation methodologies to be used for Information Technology—I suspect we are using some incorrect ones. To extrapolate slightly, incidental effects of introducing IT have been well recognised internationally as being major areas to look at in evaluation and are often unknown at the start of the project but are often of the greatest benefit. That is a very hard case to make an evaluation if you are going for funding, that something might happen that is interesting, but it is well known.

In terms of other standards, certainly the divide that has been talked about this

morning—and I suspect for the last few months with yourselves—has been the Commonwealth-state funding issue. I find it less of a problem, but it is a problem. I also think that you need to create—if you refer to the PRHCIT report about telehealth and rural medicine—the idea of clearing houses that can say what has gone on, what works, what does not, so it is not repeated. And, finally, rather than call them pilots, they should be operational. They should be deployed with a view to continuing, not merely to ending, to prove a point. I think the points have been proven many times already here and internationally. We are at a stage where we could say, ‘This low-scale project will scale up in this time period, cost this much, and achieve this’, and have back-out strategies and a business plan that says, ‘Stop doing it if it is not working’. That is not how pilots have operated—so, operational deployment.

CHAIRMAN—Or whether it would be successful or unsuccessful and then forgotten?

Prof. Cesnik—Certainly. There is seldom any group, agency or organisation that retains responsibility for the nature of those projects. They come in under the banner of other areas.

CHAIRMAN—I think a moment ago you said that there was not the sharing of information and the sharing of results that there should be, and I see the validity or the reasons that various bodies would use for that, but clearly from a national perspective that is not a very desirable situation. How would you suggest governments, state and federal, or maybe the professions should facilitate the sharing of information? By sharing information from pilots we are more likely to get this technology up and running nationally.

Prof. Cesnik—It is one of the areas where investment by government need not be necessarily large to lever previous experiences. Do you create yet another body such as I have suggested, a national centre of health informatics? Or it could be a variety of things like that whose responsibility is exactly that task. The reason I suspect there is less sharing is because there is currently no such target. No IT projects in health are mandatorily sent to any sort of place consistently to be documented, to be broadcast, to be told to others and, equally, for those seeking information, where do they go? I am receiving at the moment about five or six phone calls a week from individual GPs. That is crazy; why are they phoning me? I am very happy to help them, and I can usually answer their questions—

CHAIRMAN—That is why they are phoning you.

Prof. Cesnik—But why isn’t there someone better than me is the question. I am happy to do it, but they are coming into my working life five or six times a week. That is okay, but there is not any agency satisfied by either—the AMA, the College of General Practitioners, federal government, GP branch or any of those—that appear to be able to

answer their questions. They are getting better, I must admit.

CHAIRMAN—Why not?

Prof. Cesnik—Robbers and barons mentality, castles of ownership, historical positions adopted by professional bodies, governmental agencies. In my submission I am quite happy, and have written there, that in our evaluation role with general practice branch I faced three or four different heads of that branch, each with a lack of IT experience, having to be completely re-educated as to not only what their own projects were but what had gone on elsewhere.

CHAIRMAN—How are we going to overcome this problem? Clearly we must.

Prof. Cesnik—Clearly we must. I suppose one of the ways to do it is in fact using focuses that you can manage. I would suggest, for example, pragmatically, that a subcommittee of NH&MRC titled health informatics be created so that it is in fact an august, respected body that can distribute part of funding in an intelligent way and act as a central clearing house for activities under its banner. That does not exist.

CHAIRMAN—Have you suggested it to the minister?

Prof. Cesnik—No.

CHAIRMAN—All right. Mr Quick.

Mr QUICK—With all these pilots, a simple way that we could at least share some of the information would be to put a stipulation in the tender contract that, as well as the written report in the current format, we put them all on the Internet. At least they are there and people could access them. That simple stipulation, that in the evaluation from pilot A, B, C or D or whatever it is, has to be automatically placed on the Internet for evaluation as part of the evaluation thing. At least then people would see it is up there and if they were interested they could read it, but at the moment, as you say, it is hidden away God know's where and people are operating in a real vacuum.

Prof. Cesnik—The idea is a good one but I think it is a simplistic view of what the Internet can achieve. If every pilot project were to be placed to an Internet site they would be placed on a multiplicity of sites, unable to be viewed in their whole or searched for information across such activities. What would be better is to say the reports of this must be in a web publishable form and submitted to an agency whose responsibility it is to maintain currency, provide value and add tools to the gathering of that information and perhaps do their own evaluation of the evaluations, because that is often a failing.

Mr QUICK—Within state health departments and the Commonwealth Department of Health, what understanding do they have? You are talking about general practitioners

and colleges and things and the lack of understanding they have but within the Commonwealth department and the state departments, what understanding and sort of empathy do they have towards what you are promoting?

Prof. Cesnik—The answer is twofold. At a Commonwealth level while there is expertise that I have individually met and identified, it is seldom shared or sitting in logical places. It is ad hoc. I might reach a department whose role is IT and find someone not well informed about IT. On the other hand, I might find someone involved in rural health care who is enormously informed about IT. So there is chaotic organisation.

At state level, Australia is changing presently from what used to be a centrist state health view—we will buy system X and it will be deployed and everybody will use it. New South Wales is the first to admit that they have tried that in three iterations and it has not worked very well. In fact, they are now rolling out their next strategy which is more a decentralised view. The nature of state systems is that they have recognised the need to devolve certain decisions out there rather than centralise and what they are insisting on is protocols and policy. I think the states are doing better than the Commonwealth, but the reason for that is an absence of direction.

There is the CHIME initiative that runs through South Australia, New South Wales and Queensland to do with community health care and information gathering standards. Those three states—Victoria has not participated yet—have managed to get on and agree about a standard. They are having trouble doing it and one of the reasons is they do not know whether they are going to be right or not or whether, at a Commonwealth level, what they are doing will be seen as useful. There is a lack of direction for them.

In summary, it varies at times. The level is better than it used to be but less than it ought to be.

Mr QUICK—In similar federated countries like Canada and the USA, are they having the same problems or have they sorted this out?

Prof. Cesnik—I will give you three examples of decreasing familiarity to us. Canada is closest to us. Its size and nature being First World means it has a great interest in solving telemedicine problems. They are better than us at this, and have been for some time. They have been using communications systems. Their primary care practitioners adopt them more readily and they certainly have got telehealth activities far greater than we have.

The Americans are a completely different model driven by the commercial sector and peer group pressure and therefore it is difficult to compare them. I do not think they are essentially better off than us as I think they are paying more for their individual health care and have a lousier track record.

At the other extreme, I recently spent six months with a professor from Arlborg University in Denmark who has been running for three years a distance education course in health informatics. It is well subscribed to and by legislation it is 40 per cent supported by government, and that has been so and will be so for the next three years. They are educating their health professionals and others with a government subsidy because they recognise the need. None of the other two countries I mentioned, plus Australia, do that.

Mr QUICK—Are you aware of any examples of pilot projects that are being run in Australia where the solutions have already been found in Canada, for example?

Prof. Cesnik—Yes and no. As for solving the legacy problem of hospitals, for example, there are old and aging systems. You have asked what we do about dissimilar information systems. The current solution to that is seen as wrapping these things up in a standard, such as HL7, to allow dissimilar vendor products to talk to each other. That, by the way, is an exportable product if we do it before the Americans because they have not done it yet but they are working very hard at it. We can do it here in the same time. The fact that we do it here and it is being done there does not matter because the solutions are not entirely clarified yet and known. You will see what appears to be parallel, repetitive work but it is not always.

If you are looking at, for example, billing issues of telemedicine crossing state borders, the Americans are more sensitive to it because they get sued twice—they get sued for delivering the service in state A while you are in state B, and both states sue you. So they are very complex about it. The solution is a technological one lying in accreditation and validity: how do I know that radiologist was on line for that time and it was them, and therefore they are accountable?

So yes, the answer is scan the world all the time and see what they are doing. Surprisingly, you will still miss out on a lot of what is going on because other countries have the same problem as us with pilots—things are done and lost. I find out much about what is going on elsewhere by personal exchange when meeting my colleagues internationally or regionally.

We have a conference coming up, a Health Informatics Society conference, combined with the Asia-Pacific regional one in August. I have found that such gatherings do serve to let people know what each other is doing. It is unfortunate that in an IT-orientated conference the physical gathering of people is critical to its working, but it is true.

Ms ELLIS—Bizarre, isn't it?

Prof. Cesnik—Virtual conferences are not likely to work just yet. They also get you out of your office, so it is a good idea.

Dr NELSON—Just coming back to your suggestion about the NH&MRC having, I presume, a standing committee as distinct from a working party, whilst I would support that, do you feel that it is a lack of political will on the part of the Commonwealth in terms of taking a lead, and would it not also be appropriate to have a specific department established within the Department of Health and Family Services to deal specifically with health informatics?

Prof. Cesnik—Yes, and that is with my glasses of faith on, that an internal government instrumentality would succeed where a whole host of others has not. However, a department that is focused on this specific issue, yes, is helpful. It would certainly help as long as part of its role was inward-looking in terms of the activities of other departments, not merely outward looking as to what should the community do, otherwise pilots will still get lost up the secondary channel into the other department. That is a common problem in health.

As for the NH&MRC standing committee, I think it is equally important and both should exist. There have been numerous undertakings to produce government bureaucracies versus independent standing vendor groups producing advocate bodies. Seldom do each completely satisfy what they were created to do. There is a mix of them absent at a top level of policy and decision in investment. NH&MRC would provide for funding in some degree—although that is a whole issue; recognition, and in fact clarity in development. Currently people wanting to explore IT often hide what they are doing by putting it under the guise of a clinical presentation to actually get funding for it, while what they are really doing is exploring Information Technology. They just know that if they present that first they will be rejected; they do not have an agency to go to.

As a working example, I survive on something like greater than 60 per cent of external funding to run my centre. I have not yet received one NH&MRC or ARC grant. I have not applied for that many of them because I knew they wouldn't work. Maybe I could have, but I found the time I would have to spend making that case would be less than offering something pragmatic to other agencies.

Dr NELSON—So you think the Commonwealth government ought to make further funding available to the NH&MRC to allow for funding for specific research programs, dare I say more pilots, in health informatics?

Prof. Cesnik—Not necessarily. I do not believe that the funding amount would necessarily increase that dramatically, otherwise you are just asking for money to be thrown at the problem again—and there has already been a lot of money spent. I am personally overseeing \$12 million of it resulting in projects that did not lead far. I think the issue for NH&MRC is that Information Technology of all disciplines in health care has a reasonable chance of attracting external sources from industry vendors and others, perhaps more so than other areas.

I would see an NH&MRC standing committee as providing funding that assisted in that process of establishing relationships, the true vendor research issue, rather than ‘We are academic, you are corporate; we can never talk’, because IT can’t survive in that model—it is a corporate issue. Some funding is needed, not to complete projects but to say ‘Who are you partnering with, are you doing it logically, what is your outcome, what will be deployed at the end of this—not a pilot.’ So that would be my internal role. I do not think that would bite into current NH&MRC research expenditure that greatly.

Mr KERR—Could I take you up on your cost benefit comment earlier? You are saying that no-one has yet been able to establish a credible case that suggests this either will present a cost benefit advantage or not. Then you say that perhaps we should not look at it through that cost benefit analysis framework. If we are not going to do that, what framework do we look at it through?

Prof. Cesnik—I am not saying you should not use a cost benefit framework. I am saying that what defines ‘benefit’ is the question. In the last number of years in America, in fact over the same period of time, \$450 billion was spent last year on Information Technology by American business, of which—in their own reports—\$180 billion worked. They better have made some massive productivity increases to make up that shortfall to justify that expenditure, and I do not know people can work that hard. So it is not possible.

What is the benefit? The benefit is a recognition of time for these things to take effect. Certainly ubiquitous computing where everybody has access to an on-line system is when you may start to see the benefits of ubiquitous computing. You will not see those benefits on the stand-alone PC, but you have to deploy a massive infrastructure in the first place to hope those benefits will occur. Some of them are being shown to work, so there is hope. It is the light bulb argument: the light bulb by being invented did not make any difference but, when everybody had one—or at least a majority of people had one—it made a difference. So I think in terms of benefit, there are other benefits.

Without doubt, the pendulum of health care is swinging to primary care and away from tertiary care, and the big question for Information Technology is how it follows that focus rather than remain seated in corporate and tertiary care management. General practitioners are happy at the moment the pendulum is swinging towards them. But it may well be that it just keeps swinging and goes out to the consumer. In the end, we are talking about personal health records. Where does that lead? Benefit is therefore defined as something the patient says is benefit, and end user assessment of the value of services, the value of care, needs to form a greater part of what is seen as benefit and IT which is currently evaluated by the developer. Most IT projects are driven by enthusiasts who happen to be the evaluators of their own work.

It is well known internationally—and a fellow called Jeremy Wyeth in a recent textbook about evaluation methods in IT pointed out—you do not use these people to do

the evaluation. Their end target may be the better target. So if you have greater consumer satisfaction, you have objective markers such as improved health—which is very difficult, I am the first to admit—then you may well have a better cost benefit model. So it is not that the model is wrong; it is the scope of what construes benefit that may be wrong.

CHAIRMAN—You have suggested that we move forward by encouraging people to operationalise what has previously been put forward as a particular pilot project and to have an evaluative stage. What would you build into that evaluative stage, and over what time frame would you suggest that be brought into effect?

Prof. Cesnik—Again, borrowing from Jeremy Wyeth—I will happily give you the reference—one of the characteristics of health informatics research and evaluation that is different to other research and evaluation methodologies is that it changes more dramatically over the life of a project; it has to be revisited frequently as things change. Formative evaluations are probably more important than summative ones—formative meaning that evaluation during the time of implementation and deployment of the whole thing tends to tell you more than waiting until the very end and then looking retrospectively and saying what happened. That is often a lacking characteristic, so they should be in there from day one as part of the process, but be prepared to change. They should be given more time than they are given now and, perhaps most intelligently, they should be less objectivist as opposed to subjectivist.

I have witnessed general practice branch seek very quantitative data out of certain projects that in fact were delivering qualitative experience and, therefore, the project was at day one destined to fail by definition because it would never satisfy that outcome. So there are better methodologies understood now. They should be included day one, and continued for the life of the project.

On a business model, I would say that back-out strategies that leave something behind should things be failing are important so that you do not wait two years and say, ‘Well, that didn’t work’. At least, at the six-month mark, if you call a halt, there is something on the ground that is useful—and you can design work this way. We do not.

Ms ELLIS—Again on cost benefit analysis, another view that I picked up very strongly yesterday when we were at the ACCI was the preventative role that comes into all of this. I do not think it would be outrageous to say that governments generally have a certain degree of difficulty in allocating adequate funding to a preventative model of health, given the urgency of the day-to-day funding. To what degree do you see the preventative benefits as an important element of cost benefit analysis, and to what degree would you agree that that may be a difficulty in having factored in, despite the obvious gains and the obvious importance of the preventative side of things?

Prof. Cesnik—First off, it is very important, in answer to your question. A second comment to make is that it has been objectively proven that information systems offering

preventative management do work. So the argument about whether that does help does not hold water. More importantly, that has been proven in Australia by Australians.

Ms ELLIS—It was very evident yesterday in the very small sample we had.

Prof. Cesnik—I think that that is something that sits at a policy and belief level. Because you cannot satisfy the quantitative matrix of preventative care, it does not mean you are allowed to say you will not do it. That is one of the risk areas of IT—that is, investment of this kind will give us a benefit in patient health care down the line because we practise what we believe are good preventative protocols shown to be helpful elsewhere.

I would reverse the argument and say immunisation seems to be a good thing. How can you possibly argue against it? It is the same issue of preventative care, which just happens to be a microcomputer-based, perhaps, issue. Preventative care is argued against almost only in Information Technology. Well, it is argued in general practice; I take that one back.

Ms ELLIS—I have to declare an overwhelming bias towards preventative health. I would much rather we all sat around and talked about how we could spend health dollars in a wellbeing sense rather than an ill-being sense.

Prof. Cesnik—I think patients will drive it as well.

Ms ELLIS—Absolutely.

Prof. Cesnik—The community itself, in seeking resources like the HealthNet, like the web, patients are already turning up in practices holding print-outs off the web. They are themselves empowered. I have spoken to general practitioners all over the country and said, ‘Two years ago I would try and enamour you of these technologies. I am warning you now: you no longer have an option because your patients are the ones who have become informed now.’

Mr KERR—There are all kinds of weird and—

Prof. Cesnik—Oh, selenium makes you live for ever.

Mr KERR—I have to say that the universal optimism that seems to be sometimes manifested—and insanity can be transferred by the web as well as—

Prof. Cesnik—Thirty-five people just proved that recently by putting on Nikes and going on a spaceship. However, that should be seen as a positive by general practitioners because of their historical position of being informative, trusted advisers, the validators of external material, which they have done reflexively and more consciously with better

education in recent years. The Internet is an issue crying out for exactly that role. Who validates? Who screens? How do I talk my patient out of believing that in selenium there is immortality?

The answer is that I have to be comfortable with where they got the information to argue against it. Then I can argue against it using many traditional models of scientific proof, whatever I like, or sheer love and care. But if you have the reaction of, 'Where did you get that', the patient will immediately start discounting your validity as a commentary on that information. So you do need to be au fait with where they are getting these things. I would suggest many of the current off-the-shelf publications regarding health are equally misinformative.

Mr KERR—Bizarre.

Prof. Cesnik—In fact, most glossy—

Mr KERR—But I found today some scepticism, for example, from Dr Michael Epstein, from the Royal Australian and New Zealand College of Psychiatrists, who explained that there was this very large pool of undiagnosed people suffering severe mental illness in Australia. In a whispered conversation he said, apparently, there is an alleged undiagnosed pool of 24 per cent of young people suffering severe depression. I thought it was fairly rational to be a bit depressed if you were unemployed and young. It does not seem to me to be something that you necessarily characterise as illness.

Prof. Cesnik—No.

Mr KERR—I just wonder sometimes about people with aromatherapy and God knows what else, strutting their wares around the place. That is fine, but we are in a very blurred area here if you are saying, 'This technology brings it all within the empowerment of the individual consumer.'

Prof. Cesnik—In terms of the question before this inquiry, one of the big areas to focus on is that the thing which will drive the success or failure of the Internet or the Web is, in the end, content. It is not access. People have been enamoured by the ability to access the system—and that has been enough for a while: 'I am on the Web.' 'That is exciting. To see what?' 'Anything.' After a very short time, busy clinicians stop using it because they say, 'I have this information—the stuff that is valid—already. The rest is wasting my time.'

In Australia, HealthNet is a good initiative. But, again, it is government based and it tends to be preventative care. It is a focused thing; it is not broad. There are not enough validated content repositories in Australia relating to Australian health care that consumers can go to. Certain states are fostering them, but they are not out there at the moment. Part of that is because of lack of direction and support and the recognition that that is an

important thing to do. There is a lot that can be done at relatively low cost.

Ms ELLIS—In the whole question of how we get government at all levels to start to address more seriously the benefits of all this technology, what valid role do you see federal and state governments having?

Prof. Cesnik—Their funding opportunities, by themselves, give them a role. You cannot escape it. I would suggest that what you need is participation—

Mr ALLAN MORRIS—Unenforceable.

Prof. Cesnik—Earlier on, someone asked if you could enforce a standard and the answer was that maybe we should not. I think you should. For example, Dr Wooldridge announced that HL7 is now an agreed upon national standard. It has no operational validity because the software vendors themselves do not have to adopt it to have products approved for use in health care. That is a real pity in many ways. If they did, a lot of our legal suit problems may well be solved.

Mr ALLAN MORRIS—I am quite alarmed by your submission because it is actually extremely negative. In fact, it is the most negative one I have seen to date, but it is probably accurate. However, with regard to your solutions, I would really encourage you to go away and think a bit more, because your solutions do not offer an answer either. Basically, I think you have a false impression of what governments can actually do. The idea that, somehow, Canberra is going to tell a particular hospital what standards to use in its medical recording just is not on. If Canberra were to withhold funding on the basis that a particular health system was not using an appropriate data reporting system, a particular standard of transmission, or whatever, there would be a massive outcry.

Prof. Cesnik—If I can interrupt, I disagree with you totally because—

Mr ALLAN MORRIS—Do you want some examples? We will just take DRGs. How much have we spent on Australian DRGs and how many exceptions do we have so far?

Prof. Cesnik—I will give you a better example. I am not suggesting that any hospital buy system X, using product Y, to use the stuff the government wants. What I am suggesting is that the vendor community that makes the products that are used in health are themselves not adopting standards. Why? Firstly, because there is no market edge to them doing so; secondly, because they can; and, thirdly, because no-one said they should do otherwise.

If a standard already announced and recognised in this country for health level communication—HL7—is still optional to software vendors in this country, then I think we have missed an opportunity. I am not suggesting that the Commonwealth drops to the

level of individual implementation, even software, but what standards we require, such as HL7, perhaps an array of coding mechanisms like ICD-9 and all the other numbers you have heard—there will not one; there will always be many—and that the government at least says, ‘The following four are acceptable to be used in a system.’ Vendors would suddenly find a very strong reason to use them.

Mr ALLAN MORRIS—Answer your own question for me: why isn’t Victoria part of the system with South Australia, Queensland and New South Wales?

Prof. Cesnik—The CHIME initiative? I would say it is because recently with their attention to the restructuring of their metropolitan health care strategy they are—

Mr ALLAN MORRIS—That answers the question, doesn’t it? Since federation, we have had different gauges, different education systems, different trade qualifications, and so on. This is just one more example of fragmentation.

Prof. Cesnik—Before I run out of time, I want to give you a pragmatic example of something we are doing, which is primary versus tertiary care. On the issue of getting information out to GPs we have tested and will be putting out a system that says, ‘Send a Web based message from the hospital and it will get to the GP whether they have e-mail, post or fax.’ A background clever little box will say which way it goes. The maintenance of that system is the responsibility of the Division of General Practice. That is a deployable, easy bit of technology that achieves an end.

Mr ALLAN MORRIS—I just do not share your optimism. I can recall being told how GPs get sent faxes on a discharged patient on Friday afternoon, and it is the locum who is on then and does not know the patient anyhow. What I want you to think about, given your position and your technical expertise—and you heard me raise the question earlier with Dr Graham from the Royal Australian College of Medical Administrators—is that we are being asked by medical practitioners to accredit, if you like, for Medicare payments the use of various forms of technology. One of the options with that is saying, ‘Yes, but only if these kinds of things happen.’ If you are looking at the payment system, that would be one way of doing it.

Your solution is very soft. It is assuming that governments can actually do things, when I don’t think they can and, more likely, the state governments will argue and find reasons why they should not because it would mean that their figures might become more transparent. Remember, what often goes on is cost shifting, camouflaging and hiding costs, and all the other things that happen, as well as all the turf wars within and between them. Can you think of a more precise way, where the Commonwealth could do it either by use of its individual funding powers for particular kinds of things like Medicare, like a reimbursement, or in terms of capital grants to hospital systems or access to PBS. There are a range of areas where that would happen, but that we do not have.

No-one has yet done for us a fit of the various standards. People are talking to us about pharmaceuticals, about imaging; they are all talking about their own area. No-one is actually talking about how all those areas fit together and how they, in turn, fit to government. So what this committee will end up with is probably a bit of a topsy exercise, a whole range of recommendations which will be pretty motherhoodish and all very nice, but because they are so disparate they will not really pull together. They will not give a course of action that is enforceable. Someone like yourself probably knows enough about the range of options, information and standards, and how they actually fit together.

Prof. Cesnik—I would think I do. Certainly, it is something worth applying myself to—and we do that in many ways, in all honesty. But I would not expect an inquiry such as this to come out with an entirely operational plan. That is not its purpose.

Mr ALLAN MORRIS—I agree with that, but what we are likely to come out with is just more fragmentation.

Prof. Cesnik—No, the inquiry may well be able to offer suggested structures to allow the development and creation of an operational plan.

Mr ALLAN MORRIS—Only if someone gives it to us, because we will not be able to put it together ourselves. We are being lobbied by all the sectional interests—

Prof. Cesnik—I bet!

Mr ALLAN MORRIS—with their own particular packages and particular prejudices. So what we will probably reflect is a whole series of things which may, within themselves, be inconsistent.

Prof. Cesnik—I operate under no illusions. When this inquiry was announced and I saw its terms of reference, I thought, ‘I will take this for what it is on the surface—that is, a good idea and one that is needed. What happens to it may fall the way of many things that have gone on like this in the past. It may succeed or it may not. That is your charge, not mine.

Mr ALLAN MORRIS—Except that you could help us.

Prof. Cesnik—I am happy to.

CHAIRMAN—I think your submission was a very good one and very thought provoking. We very much appreciated receiving it. I do not know whether all of our colleagues would agree with Mr Morris’s interpretation of your conclusions as being negative.

Mr ALLAN MORRIS—What I am suggesting to you, Professor Cesnik, is that

what you have put forward is that governments can fix it because they control the money. What I am suggesting is that, in theory, that may be the case, but in practice, because of the technicalities and all the turf that is involved, it actually takes someone who has a knowledge of those various areas to put forward a framework in which that could operate—not a package in terms of all the procedures, but the framework. We have not seen such a framework to date, from my observations of the submissions. What we are seeing are individuals' claims for their particular area to be addressed. We are not seeing a framework which would encompass them.

It takes someone with your kind of background across the whole area, in a technical sense, to say, 'That is the kind of framework you could have. HL7 should be compulsory and there are these various others which are required. The bandwidths need to be of a certain size.' There is a whole range of things that are involved that we will never be able to put together without employing a consultant to do it for us.

Mr FORREST—They did not have a parliamentary inquiry after Alexander Bell invented the telephone. It happened because people drove it; they wanted improved communication.

Mr KERR—Could I just ask one question about the point that Peter raised regarding a billing system for consultations or the use of telemedicine, were it to be refunded out of the public system. Earlier submittees have said, 'Look, it could be done. There are recordable events that can be made relatively secure against fraud.' Do you have that confidence?

Prof. Cesnik—I think that is likely to be a far more accurate means of tracking clinical delivery than currently exists, because the technologies themselves can track the interaction, whereas currently you are hoping that the clinician will be honest in saying, 'I did do this.' The delivery of a tele-radiology session, I suspect, may involve a camera at both ends, with the appropriate radiologist being recorded on video disc as having actually been there, for example, or having done their work. So it is eminently more trackable. I wonder whether simplistically it can be reduced to a series of coding numbers. I suspect that the funds may move out into a different region as to quality of care overall, not point-to-point service related.

CHAIRMAN—Thank you very much for appearing this morning and this afternoon.

We have already authorised the publication of the majority of submissions. We have now received six further submissions, including one this morning from the National Ageing Research Institute. I seek leave of the committee to authorise the publication in the transcript of evidence of today's proceedings of submissions numbered 120 from the Northern Tasmania Division of General Practice; 124 from PCS Health Systems; 125 from Dr Ian Cheong; 126 from the Australian National University; 127 from Communications

Engineering Pty Ltd; and 128 from the National Ageing Research Institute. There being no objection, it is so ordered.

Luncheon adjournment

[1.23 p.m.]

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

ALEXANDER, Dr Maxwell Peter, Director, Communications Engineering Pty Ltd, PO Box 372, Chelsea, Victoria 3196

CROMWELL, Dr Lawrence, Managing Director, Communications Engineering Pty Ltd, PO Box 372, Chelsea, Victoria 3196

SCOTT, Mr John Walter, Principal, Edja Services, PO Box 387, Kippax, Australian Capital Territory 2615

CHAIRMAN—Welcome, gentlemen. We have received your submission. It has been circulated to members of the committee. Could one of you give us a brief opening statement?

Dr Alexander—I have a prepared opening statement. At the outset I wish to introduce my colleagues. Each of us will make a brief statement before responding to any questions you wish to put to us. Mr John Scott is Principal of Edja Services, which provides consulting in the area of health care communication. John was for many years specialist adviser, business and strategic planning, in the information services division of the federal department of health. His brief was to monitor advances in information and communications technologies. He brings an intimate knowledge and expertise to the interrelated areas of technology impact, governance and privacy protection. His work within the federal government led him to becoming involved in, and in some respects leading, the government's response to many of the issues which are being considered in this inquiry. That work spanned the Department of Finance and the Attorney-General's Department, as well as health.

Dr Larry Cromwell—a non-medical doctor—is the principal of Communications Engineering.

CHAIRMAN—A real doctor, as I have said in earlier hearings!

Dr Cromwell—I would concur with that!

Dr Alexander—He was the originator of the health communication network concept into which government and business from both the health and telecommunications sectors could work together to improve both health care and the business returns of investing in health services. This concept led to a design which combined sector based communication patterns, particularly in the Australian health sector, with telecommunications networks and services creating new businesses at the junctions of old sectors.

I am Max Alexander. I am a doctor at present in practice in the Royal Melbourne Hospital. My background is in general practice health services research, teaching and over the last years I have been involved with my colleagues in developing health communication services, including telemedicine. Since 1994, I have been Medical Director of Communications Engineering.

I have had a good deal of involvement with the Health Communication Network with other related activities in the area of information and management of telemedicine in health care, both within Australia and internationally, and played an active role in the Australian G7 proposal for developing telehealth services in a submission with Western Australia, South Australia and the Northern Territory.

I wish to make four points. First, delivering health care is an information intensive activity and care is improved with better information management. Good information should be regarded in the same way as clean water and effective sewage disposal from the public health point of view. Furthermore, there are undeniably areas where our health care system does not deliver as it might from this viewpoint.

Second, the evidence in our view is unequivocal that IT&T technologies can be used to great effect for better care. Third—and this is true across the board—that, as a community, we should be most interested in those developments which contribute to populations at the greatest disadvantage in terms of high quality health care in Australia; that is, rural and remote populations, and including, especially, the Aboriginal population.

Fourth, we feel the time is right for a coherent national approach which gets away from the limitations of the current situation, which in many respects is like a whole series of unrelated pilot projects—a path which is costly and duplicative and where we are not gleaning the learning from all the investment that has occurred.

The inquiry has filled volumes with reports of projects which are clearly effective but what is lacking is a framework and a forum for focusing national development. In order to move forward we are interested in proposing such a framework. Our written submission explored some parts of this.

In addition to the four summary points I have just raised, two critical elements will be briefly examined by my colleagues. Mr Scott will address the role of government in health care communication, especially the nature of leadership which is needed. Dr Cromwell will address the business of health care communications and the role of government which business would welcome.

Mr Scott—I wish to make a number of comments on the leadership role of government in health care communications and the linkage of that leadership role in investments and services. The health care sector is so fragmented that a major challenge is to find ways of collaborating with one another. This is the governance issue. The key leadership role of government, particularly the national government, is to establish the new

frameworks which promote collaboration.

Without effective collaboration, there is no way to respond to the challenges of rapid technological change—for example, new standards for professional practice; the need for a co-regulatory approach to privacy; choosing the right IT&T technologies appropriate to health care; and finding new strategies for funding. With effective collaboration, we can address these challenges together as they arise.

An example of the success of our work was the creation of a co-regulatory approach to privacy which could meet the EC requirements for electronic communication in health care without the attendant legislative base of data protection.

The framework we propose has the additional benefit that any required government legislation will be derived from experience and well targeted. A key component also for health care communications is the creation of public-private hybrid organisations able to balance public and private commercial interests.

Finally, the time has passed for government funding of myriad pilot projects. These are wasteful of scarce funds and all too frequently lead to dead ends. Government needs to adopt a more systematic approach to investment involving larger scale thinking and a far better appreciation of how its investments contribute to drawing in outside investment for the creation of new public infrastructures.

One way to do this is to move away from ‘whole of government’ thinking and towards ‘whole of sector’ thinking. Another way is to target government expenditure on communication services which meet its needs and which provide confidence to business that the investments are consistent with the larger scale plan of development. I can tell you from our experience that business will compete to serve a sector which is cooperating to define its needs. Without that cooperation, it is too hard for business and the health sector will continue to lose out. At this stage, I will pass to my colleague Dr Cromwell, who will talk about the business perspective.

Dr Cromwell—Thank you. My business is the business of health care communications. Our specialty is in public infrastructure, from the design and development of health services which can travel over telecommunications networks, to the organisational frameworks which can safely integrate public providers with private suppliers. Our belief is that it is possible for government and business to work together in new ways, through the recognition of the mutual interest which they share in providing efficient services with effective reach. With my colleagues and many other people, I have designed health care services which are organised by their stakeholders and are dependent upon intimate government involvement but minimised government intervention; services which are predicated upon a clear understanding of where government should play an active role and where it should have a watching role, and of where business should have an investor role and where it should have a supplier role.

Business and government need different comforts. Government needs to know that its citizens will receive adequate services; business needs to know that the arrangement will remain in place long enough to pay back its investment. The strategic framework for the organisation of health information and Telemedicine services which we propose is, at its heart, a comfort mechanism. But, in order for it to work, government will have to take the lead; business cannot.

Many years ago, I was involved in the North Slope oil development, which gave rise to the engineering feat known as Alaska Pipeline. The leadership—which resulted in the protection of wildlife, of residents and of the fragile ecology—was entirely provided by government. The investment was entirely provided by private enterprise. The design and construction was jointly overseen. The oil companies pleaded with the government to tell them what had to be protected, so that they could get on with the building.

Here in Australia and across the world, business is ready to invest in developing and constructing Telemedicine services. Business needs a place where incremental health service development makes sense, where 100 companies can do their bit—a framework where health people can have confidence in business, a framework which guides government investment in health communications and Telemedicine, a framework for investment and gain sharing. This is equally applicable to education, law and other sectors. In the case of the health communication network, all that is needed is to make use of an organisational framework which has already been worked out with great effort by many people, just for this purpose.

CHAIRMAN—Thank you very much. Dr Alexander, you have had a key role; in fact you are the author of the discussion paper on Telemedicine for AHMAC. What connection does your current enterprise have with AHMAC or the Health Communication Network?

Dr Alexander—The history of it is that it was a favour whereby I simply agreed to contribute my bit for the AHMAC process. It was not formal, or anything of that order. In terms of the connection with the Health Communication Network, there was no formal connection. I discussed some HCN issues in that paper, but it was not a formal connection. It was really an individual effort provided for, I guess, the public good—something of that order.

CHAIRMAN—You seem to think that there is a difference in meaning between Telemedicine and Telehealth. We have asked numerous witnesses at earlier hearings what the differences were and why one term would be preferable to the other, and most people seemed to think that there was no real difference and it did not matter what you chose. I see that you have come down with two different definitions and you think both should be used in their place. While there is nothing wrong with what you suggest, it seems to me that, unless we can get the whole industry to agree on uniformity of definitions, it is very difficult for you, as a company, to seek to impose your own definitions. How do you see us moving in the direction of arriving at some agreed definition of Telemedicine and

Telehealth?

Dr Alexander—The comments in the paper were really aimed at addressing what I saw as a confusion. I was not recommending one or the other. I was saying, ‘This is the way people use words, and one needs to be aware of where they are coming from to make sense of it.’ I spelled out some of the history behind the different words being used. Do you want me to revisit that, or simply to conclude?

CHAIRMAN—It was as much a comment as anything. What you say is very rational; but, while ever the whole world does not agree with you, you have got a problem.

Dr Alexander—I can tell you that, in the academic literature, the use of the word ‘Telemedicine’ is as I stated it. That is quite unequivocal. In other circles there is clearly a difference of opinion and people use ‘Telehealth’. As long as one takes notice of where they are coming from, it really does not contribute to the debate about what we should actually do, and that was the burden of my comment: it is a bit of a red herring.

Mr QUICK—I am interested in your statement on page 8, where you say:

We see the problem not as one of gridlock, but rather as not having the right sort of ‘grid’. We need a ‘grid’ which knows which sorts of information are urgent, and which may be private, and which are asked for and which are not, and so forth.

You say that there should be a leadership role from the government; but what about a leadership role from the Commonwealth department? Has there been much in the way of a leadership role there?

Dr Alexander—I will comment very briefly. To my knowledge, the Commonwealth’s support and initial funding of the HCN was a quite striking act of leadership, back in those days. It was, as I understand it, quite a visionary and risky move, with some high stakes involved. All you can say at the moment is that times have changed. There was initial leadership of a very high quality. It is probably not for me to comment on more recent changes.

Mr QUICK—You state on page 7 that there is \$35 billion of activity annually in the health care area. It is information and communication dependent, yet nothing seems to have changed. We have still got that archaic pen and paper information collection, when we are expending huge amounts of money. On the other hand, you have Telstra, Optus and everybody else introducing all the whizzbang technology, yet the health system is back in the horse-and-cart days. Why are we back to this thing of gridlock? In another inquiry, we spoke about how it took us over a hundred years to get a standard gauge from Perth to Brisbane. Is it going to take as long to sort out the mess, as far as Information Technology in Australia goes?

Mr Scott—The best answer is that there is a confusion about roles. Part of the

problem that the business interests have in the provision of technology is that they do not have a place to go to sort out many of the impediments to progress in that area. Coupled with that, the difficulty of getting various stakeholders in the health sector together—where you are crossing public, private and professional boundaries, in some cases—makes it difficult to focus on the environment that you are trying to resolve.

My best example of this is the work we did in electronic communications and pathology. The medical colleges were very reluctant to step in to address this area, because they did not understand the technologies, which were changing very fast and in very complex ways. And the vendors, for their part, were seeking to push ahead as quickly as possible with deploying technologies in the health sector because they saw the opportunity but they did not know how to go about achieving it.

What we ended up doing was working with the joint medical colleges and some of the regulatory advisory bodies to start to sort out the issues surrounding professional practice and privacy which had to be resolved before people could, with confidence, go forward in some of these areas.

A consequence of sorting out some of those issues is that you then have created the framework within which people can proceed to develop communication services, such as pathology results, reporting of radiology results, reporting of a whole host of other things which are impeded by this lack of clarity about how to approach it. Once you have done that you are then in a position to start to look at it from the business perspective of combining common interest to actually have that kind of service. That then gives you the aggregation that telcos and others require in order to create these grids, as we call them, for the safe and effective movement of information.

Mr QUICK—Seventy odd years ago John Flynn introduced revolutionary technology that crossed all state boundaries when he introduced the Australian Inland Mission and the Flying Doctor Service. In Australia we embrace other new technologies like video recorders and mobile phones at a rate greater than any other country in the world. We have got all the technology. However, we have poorly trained practitioners as far as Information Technology goes. Should the government throw a grenade in to break the log jam and say, ‘It is all here.’? We have the states running their own little agendas.

Mr Scott—The proposal that we put in terms of the creation of a framework and a governance mechanism actually provides the answer to that because, in a sense, government can’t play the role of solving the problem any more. People do not want it to do that. People want it to set up frameworks which allow people to cooperate and to address some of these issues like the, as I said, professional practice and privacy and other issues which are actually impeding progress.

I spoke with the medical superintendent at a hospital and the individual made the comment to me that cutbacks had constrained them from writing discharge reports back to GPs and they would be seeking to make electronic discharge notes going back to GPs and

others in the community, but they could not move forward because they did not have a solution to the privacy problem. You then start to come to the realisation that we actually have to focus attention on some of these impediments, but in doing that you have to bring the various parties together in a trusted environment.

Mr QUICK—Isn't that a cop out?

Mr Scott—No.

Mr QUICK—My office deals with various state and federal government departments. I ring up and say, 'I have a DSS problem'. I quote the person and where they live and their date of birth and all that sort of thing. What is the problem? If they bring the name up on the computer then their standard response is, 'That is a privacy issue'. That is the first red herring they throw out. I then tell them that the person is sitting next to me and the reason I am asking is because the person is concerned.

Let's be realistic about this and let's sort out the problem. Do I have to write a letter to your ministerial colleague and does he then have to refer the ministerial down to the department so that six weeks later we get a solution to the problem? Couldn't you just bring up the details and say, 'What is the problem? I will convey the information to the person. They can go away quite contented. The problem is solved and we can save a whole lot of bureaucratic bs.

If bureaucrats put that forward as the big excuse, I think it is a big cop out. The technology is there, the patient is ill and the patient wants a result now. They might want to know whether the breast cancer scan shows it is malignant or otherwise. They might want to know whether they have to go through this long trauma process. The patient wants an answer now. People are quoting privacy or saying, 'I didn't get the facts,' et cetera, but surely they could be dealt with quite simply, as happened with the pipeline.

Dr Alexander—To go back to where this interchange started, you asked whether we needed a national grid; and, of course, we are arguing that we do. That is point one.

Mr QUICK—What should a population of 80,000 to 100,000 have as standard requirements? We heard today that, for example, such a population in Ballarat has 80 GPs. Should those GPs in a town of 100,000 have certain Information Technology sited there, so that people within the greater Ballarat region know that it is there and that, irrespective of whether they want radiology, psychiatry or whatever else is not available there, the wherewithal is there to get it? Say that you live in a small country town of 5,000 people: all the similar sized towns should have the same standard stuff. It is like all the towns having a post office and having access to all these other things—standard community service obligations, as far as that goes, relating to health.

There should be a simple blueprint to determine who is responsible, to sort it out and to determine how much it is going to cost. For God's sake, we spend \$35 billion and

it is all a great big mishmash. Surely someone could say, 'You live in a town and it has 5,000 people. These are the standard services. If you move to a town of the next size up, it has a greater series of services.' Why can't we do that?

Dr Alexander—We absolutely agree with that.

Mr QUICK—Why isn't it happening? Is it because Victoria thinks it is better than Queensland, and they all promote each other?

Dr Alexander—Are you now asking why the effort that we put in—

Mr QUICK—What do we need to do to make sure that that can be introduced?

Dr Cromwell—You are going to need a pipeline authority. It is either going to be the one you have, which is the Health Communication Network, or one that you make out of this review or someone else's review. I am quite serious about this.

Mr QUICK—We have AHMAC and NHMRC.

Dr Cromwell—You could have AHMAC or NHMRC do it.

Mr QUICK—We have all these bodies, with august people on them.

Dr Cromwell—Exactly, but what you need is something so that everyone knows that they can go to the same place to get answers to questions such as, 'We are in a town like this: what do we do, what do we need, who can we work with, and who is willing to supply?'

Mr QUICK—People in my electorate complain because they cannot get decent television reception, but we have the National Transmission Authority that is responsible right across Australia.

Dr Cromwell—But you do not have a national Telemedicine authority.

Mr QUICK—Should we have one, then?

Dr Cromwell—Why not?

Mr QUICK—With what sorts of powers?

Dr Cromwell—Coordination.

Mr QUICK—To say to state governments that there is a town of—

Dr Cromwell—No, you will not have to. You will not have to say it to state

governments, because they actually have the same problem that the national government does: they have those same small towns. They just need some place to come together so that the people who know how to fix these things are willing to come. The people who know how to fix these things are fixing them in other countries—trust me. We are not fixing them here, but we are fixing things in other countries.

Mr QUICK—But we cannot fix them here?

Dr Cromwell—We made a good shot at it a few years ago. We just need to keep it going.

CHAIRMAN—Tell us again why they are being fixed up elsewhere but not here.

Dr Cromwell—There are a couple of quite easy answers. They are a little glib, but we are short of time—that is my excuse! One of them is that it is possible to construct authorities which do not regulate ahead of the problem but simply have a watching brief to make sure that, whatever the solution is, it is all right with everyone, including government. The best model of that was the EEC's data privacy protection, and it actually grew out of vendors, users and communities of use, and it virtually avoided regulation. I guess you know that it now has power of law for trading partners in the EEC, and Australia cannot trade now. That is what happens when you have not anticipated things eight years before.

My point here is that there are people in Australia who were, have been, and still are, anticipating those things. It is even better than Mr Quick says. It is not just that the technology is available; it is that the people who will know the technology in 15 years are here in Australia now. Some of them are here in Melbourne; they are out in Clayton; and they are in labs where people are figuring out what is going to happen—truly. But what is not happening is the coordination of what is going to be able to serve health care, because you cannot use the phone system simply because it is there.

Do you know why people do not do health care on the Internet? You cannot believe the person who types at you is who they say they are. Well, fine, don't send them my patient record. We would love to solve your problem and get it up on screen. Do we have their permission? No. Do we have an authority where people can give permission in an emergency? Yes, tell them what is wrong with me. No, we do not have that. We should.

Mr QUICK—When you get your driver's licence, do you want your organs donated, yes or no? We have got some of those procedures in place, so do we have—

Dr Cromwell—The point is that we should not have to invent infrastructure. We do not have to even invent the grid because the grid that is out there now is composed of a bunch of what are called virtual grids and there is so much telecommunications capacity and IT capacity out there now, the people are selling them to you for peanuts. We can

actually do health care without digging the lines in; we can improve health care without putting up the satellites, they are already up there; they would love to help but they are not going to come and do health care if somebody does not guarantee that governments who have 85 per cent of the expenditure in health care are not going to change their mind mid-way through an investment period in a \$10 billion operation.

The good news is there are companies that will spend \$10 billion; they should be spending them here. Australia just won the G7. You people are national government people; you know what that means. A lot of Australians do not understand. First you start with all the countries in the world and then you narrow it down to about nine and then you get it down to about two and Australia gets to be one of them. Why? They believe we can do things here, it was a good proposal, it has remoteness, it had modernity and it has state-of-the-art telecommunications. Of course they figure that they can piggyback on Australian developments.

You do not have a coordinating authority.

Mr FORREST—Assuming the government's role is not so much to make that side of it happen, it is just to make sure that those who use it have access to financial reward. That is all the government has to do: put a carrot there, not put lines in the ground or anything.

Dr Cromwell—Exactly. There is even good news on that front. They have now been working on telemedicine, health communications and health information and IT for so long, that they have figured out their own carrot in some respects, but there is no door that they can knock on and say, 'What about this?' and to say to you, 'We're willing to compete with all of the others who are competing with us in the world. We don't mind the competition. We just need a door to knock on to say: here is what we would like to offer, here is what we would like to bid for.'

Dr NELSON—One of the previous contributors said very much what you have just said in terms of a national authority. He proposed that for example, there ought to be a standing subcommittee of the NHMRC specifically funding and fostering research in the area and that there ought to be a national focus within government. Can you elaborate in simple terms what the Commonwealth government ought to be doing? If you were the government, what would you be doing from the point of view of the federal government to get this whole thing moving?

CHAIRMAN—Particularly given what you said happened in America, the government providing leadership and private enterprise providing—

Dr NELSON—We are as exasperated as you are. In fact person after person that has come to us has said pretty much the same thing in different ways.

Dr Alexander—Can I get the ball rolling by taking the connection between the

various existing bodies and the suggestion that they could actually, if you like, run with the ball? I think that is somewhat wide of the mark. Not that it is a bad idea for its own reasons but I think the NHMRC is focusing on health care delivery. It is focusing on quality of care issues and intrinsically medical professional issues, whereas what we are discussing here is the intersection between what you might call the medical industry and a communications industry. My immediate response to a suggestion like that as a solution is that it is good for other reasons, but it is not actually going to tackle the fundamental problem that is on the table here. Almost everyone who looks at it thinks that it needs a lot of dollars in a framework that is going to provide security for people putting the dollars in as well as various other comforts to do with privacy and all those things. The NHMRC frameworks really are not the right way to tackle that so I think we need a new and different form which is somewhat outside that.

Dr Cromwell—Could I just add to that, build on it and suggest this to you. With the provision of communications services for particular purposes—health care, law, sport or whatever—you start with what it is that somebody wants to do in this sector and then you figure out how to join people who are separated over great distances. From my point of view, we do not have a problem with health service delivery, we have a problem with delivering health service at a remove, at a distance.

We do not think that more regulation in the health sector is targeting the problem because what is happening is that the two sectors are not working together and we do not think that the problem is in the health sector. In fact, we think the health sector is very quick in its recognition and uptake of technologies, it just does not do things on a national scale.

I worked with a pathologist who wanted to buy a satellite ground station because he had seen the best satellite based pathology results reporting system in the world. It had to be pointed out to him that it only worked off a satellite which was above North America. He had no problem with knowing exactly what he knew he had to do to help pathology reduce costs and get service at the distance, but it simply is not part of the health sector in this country to organise itself nationally in terms of technology. What's missing is organisation of the communications people, the people who are linking things, who already have those big grids, who already have those big networks, and who wish they could figure out services but who do not have health care divisions.

Dr NELSON—If there was an authority, which sounds like one of the more sensible suggestions we have had, how would it be structured? Who might finance it? What kind of charter would it have? I understand it is a coordinating role, a facilitating role, and just making sure in a sense that we are running on a standard rail gauge, as Mr Quick so often reminds us. Have you given any detailed thought to it?

Dr Cromwell—Quite a lot. I think the working out of what it should be should itself be the first step and that that working out should be at the one time as a result of the dedication of the Commonwealth goal that this will happen. At the second time it should

be an invitation to whoever it is that thinks they should be part of it. I would suggest that there is great evidence in this country for those things working out. There are what are now in the common jargon called co-regulatory bodies but which in this country have had a wide variety of applications back to the Snowy Mountains Authority and further. There has been a wide variety. I think this is something that would tap particularly an Australian's spirit of cooperation.

What is missing is a national government announcement that this is about communications and that there is a \$35 billion sector which is pretty well organised as to service but which is really about patients. What it needs to marry with is the people who know how to get things from one place to another and how to do that best. Along the way there are people who have been working on the organisation of those things.

I suggest a national authority, a Snowy Mountains Authority model. I would pick the best model that is going now. I would make sure that it is understood that is a health communications thing, that it is not about health care, that it is not about health computing, it is not about these other things where I actually think people are doing very good work. My colleagues might want to comment. It is a big ask, describing what it should be.

Mr FORREST—I am very surprised that you are suggesting another Commonwealth agency. My observation is that governments just get in the way.

Mr Scott—I do not think we are necessarily suggesting another Commonwealth agency. We are suggesting Commonwealth participation—active, committed participation to thinking at the whole of sector level with a view to the creation over a period of time of a new kind of public infrastructure for health care. My colleague has perhaps been a bit quiet about some of the issues. I think we actually spent a great deal of time and a great deal of productive thought going into the health communication network and its structure.

One could argue about its success and there are probably a number of reasons that could be put forward to it. I think if one wants to start looking at a particular model and looking at its strengths and weaknesses, one would not be poorly advised to look more deeply at what we attempted to accomplish with the HCN in terms of its public/private hybrid structure, in its positioning in the commercial environment, but with a public interest modality to it such as the work we did on privacy and the co-regulatory structure and the framework for investment from outside the sector coming into health care, et cetera.

Whether it is the appropriate one or not, that is up for discussion, review or what have you. It was the subject of an intense amount of creative thought over a significant period of time and with a significant amount of Commonwealth investment. There was investment by a wide range of other health care professionals and administrators who were seeking a solution to this problem. In some respects it got caught up in delays getting it going through changes of ministers and some uncertainty as to what its specific role was,

because it was very difficult to enunciate the complexity of the various interest groups that we were trying to balance off.

From my point of view—and speaking from having come within government and having had to advise the deputy secretary and others about how to deal with this kind of issue—one is well advised to have a good hard look at what we were trying to achieve in that and to then perhaps, in the light of that, draw your own conclusions about the kind of authority that one might put forward. I am not by any means suggesting a government authority, because it will not be trusted.

Mr FORREST—I would just like to go back to my earlier question. It seems to me in all of the evidence the committee has taken that the weakness is the lack of willingness by GPs to get into this new thing. This is either because they feel threatened by it, do not necessarily understand it and do not have the training, but more particularly because if they do, they forsake revenue. There is no process by which they can be remunerated.

I am focusing on what evidence we can collect to improve the medical schedule to have inclusions. I was hoping you might be able to make some practical suggestions on how that can be done, because there is resistance to that. Government is frightened about open-ended budgets and how to control it. It is frightened about blow-outs.

I am wondering whether we are at a stage where those sorts of consultations can be conducted in that way and can be precise enough and outcome focused so that schedule items could be prepared. Are we at that stage yet or are we still experimenting about what can be achieved, for example, with video conferencing or consultation or the relaying of records—all of those sorts of things?

Dr Alexander—If you are examining the case where there is a patient interacting with a doctor, the analogy is that the person is really present in the room. The work that is done is in many respects exactly the same as if the person is present. As you say at the moment, that is not rewarded at all because of the Medicare rules. If you are asking whether it would be feasible to just simply change the rule to allow that kind of consultation to be billed and people to make revenue, yes it would be. It would be relatively quick and painless. I do not think it would actually cost too much, given the number of people involved at least at this stage.

Mr FORREST—Before you go on, would that be at the existing rate or is there an extra cost because it is electronically connected?

Dr Alexander—If one was to consider the economics of it, there are two sets of economics. One is the gear and who has paid for the actual equipment and the telecommunications costs. The other part is that these things inevitably take more time than having a big stream of patients running through the door of your consulting room. They are time consuming activities in the main. On the other hand, presumably people

will only do these things if there is a bit of a pay-off for it. There must be some other gain involved to do with what the patient is going to get. If one was to get into the relative value argument, it would be possible to value it—difficult, but possible. I do not think it is a big drama. It would be just a normal consultation, plus a little bit more for the bother.

The more substantive issue you are raising is to do with using IT for information management and that is an entirely different argument. I think the case where people are communicating person to person with a talking head example is readily understood as analogous to normal practice. On the other hand, using IT for receiving distant results, such as manipulating a series of results over time, using it for patient education and for all the other things that people talk about using computers for on dubious disks, is in many respects unrelated. That is more embedded in the professional practice of what doctors do, which is quite different to the consultative argument.

Mr FORREST—There is a benefit in most of those cases for the patient. For example, if they are badly injured or ill they do not have the trauma of having to travel from one end of the state to the capital or something. So there is benefit there that is not measured in any of that for the government or the taxpayer, but it is measured in terms of the patient, there is no doubt about it.

Dr Alexander—One of the proposals that we wrote about is the issue of gain sharing and that brings up what you are talking about here. We think that this will only work if gain sharing is embedded in the way the financial flows are managed. If someone is managed distantly and is not referred to a major city hospital, in some respects that is a gain for the city hospital in terms of their workload. It is certainly a gain for the patient in terms of convenience. It saves the patient's pocket in transport costs which is not normally part of the health bill. It may be an intangible gain for the GP who has more professional pride in being able to handle more cases. There are a lot of complex gains in examining these cases.

We think that, if one is constructing an economic climate where services like this can flourish, all those need to be possible to put on the table and not just simply be regarded as a professional service which attracts one or two dollars. For example, the investment from a telco might be quite different if there was a health gain sharing from the telco investment. That is the kind of trade-offs that we are interested in exploring and proposing should be part of the solution to this problem, and not just simply regarded as increasing the cheque book of the government for Medicare. I have sympathy with that to a certain point, but I am arguing that we should make it a bit broader than just simply increasing the number of items.

Mr FORREST—Where are we at though? We are still at the infant stage in terms of being able to quantify all of that. No-one has been able to tell me what a video teleconference consultation would cost with a doctor at one end and a patient at the other. The current consultation is \$28 or something like that. What would that type of

consultation cost? No-one has given that evidence.

CHAIRMAN—I think we had evidence that in some cases it should be slightly more and then we had evidence that it should be less. You are right; no-one has given us anything definitive.

Mr FORREST—We have not progressed very far. If we were to put a case in a report that we might prepare for government they have to know what sort of Pandora's box would be opened up if it is that open-ended. We have to be able to say how much.

If we were to put a case in a report that we might prepare to government, they have to know what sort of Pandora's box would be opened up. If it is that open-ended, we have to be able to say how much.

Mr QUICK—Yesterday, we heard of the case where person on King Island lacerated their hand. They had a telephone conversation with the microsurgery people and the description of the laceration was inadequate so they decided to fly him over. He was flown over and three stitches were required. You can quantify that cost—

Dr Cromwell—It is like the dead tourist they flew in from Indonesia.

Mr QUICK—The total cost of the plane from King Island, the pilot et cetera was X thousands of dollars. What does King Island District Hospital need in the way of infrastructure? Would it be an extra \$20,000 or \$30,000 for something like that that is linked into St Vincent's from Shepparton and the Goulburn Valley? You could quantify that quite easily and say, 'Okay. That's going to cost you such and such.' It would be a lot cheaper than flying people from King Island. Once they have a serious injury, they have to come to the mainland.

Mr FORREST—You still need a process to remunerate both ends and that is what we do not have.

Mr QUICK—Yes. I go back to this thing of the leadership role of the Commonwealth department. They have a plethora of subdepartments in there with God knows how much expertise. Why doesn't someone sit down and say, 'What do they do in British Columbia?' That is far more remote and isolated than some parts of Australia. They have had pilots over there. What are they doing in remote areas of South America or America? Someone gave us a classic today: 'It is about time some of them actually took off. They are all taxiing down the runway, backwards and forwards but who is benefiting?' We need some concrete examples.

Dr Cromwell—We have found that there are people who could answer that question but you would have to specify for them that you are talking about King Island and that you are talking about a link to a certain kind of metropolitan hospital. You would also have to specify the kind of injury that you are talking about and the kind of gear that

is required. They could do that quite easily, and they are doing it around the world right now. That is not a problem.

The problem is getting whoever it is that can put that gear in, at a price, to know whether it can also work in Whyalla and in North Queensland. Is it okay for it to be offered to people in the north-western part of the Northern Territory? Then they can say that they can afford to do it at a certain price, put it in and do everything else.

Mr QUICK—But you could do the same thing with a sewerage plant. How much would it cost to put in a sewerage plant for 50,000 people? Why can't you do it for health? You get the experts in to tell you the number of pipes you need, whether you have adequate reticulation supply and that sort of stuff. Then they can say, 'The basic cost for sewerage for a population centre of 50,000 is X.' It is a lot simpler to say, 'We need one satellite dish here and a translator on the nearest hill.' That can then link them into God knows where.

Dr Alexander—That sum has been done. It was done in the lead-up to the government deciding how much money it wanted to put into the HCN. This is some years ago. As I understand it, the Commonwealth government's response at the time was to say, 'That's too much. We can't afford that as a handout. It is not appropriate.' That led to the idea, which we spent a lot of time working on, of incremental growth.

While this next answer is not particularly targeted to answering your question, it somewhat answers it: it is possible to develop services one by one, in an incremental fashion, and cost them in detail—that is, exactly how much for each service—but one will only get full power of a network development when there are a lot of very rich connections. One of the problems with the one by one case is that they solve one problem whereas what we are discussing in the health care environment is connections which solve many problems. I do not think it is productive economically or accounting wise to analyse those in the way that you are suggesting we should.

Mr QUICK—But a lot of those problems are not just health related. For example, with psychiatry, as a former teacher, we had psychologists and social workers dealing with those children who were anti-social in the school situation. If we use a small country town as an example, I have underlined here 'a national communications grid'. Health is one, and social work, education and a whole lot of other things are part of that grid, but I wonder why we isolate it and say it is a national health communications grid. I mean, it could be used for other things. There ought to be a whole lot of people putting their hands in their separate departmental tins to set that in place.

I think the cost issue and the privacy issue is a big furphy. I think we could have it up and running, we just need to convince the Australian people that it is something that is going to be of huge benefit to them and let's go and do it.

Mr KERR—There was a previous witness, Associate Professor Branko Cesnik,

who said that no-one has been able yet to affirmatively establish a cost benefits justification for doing any of this. He said that it was plausible and it may do so once it gets up to a certain size of operational velocity but thus far in no jurisdiction anywhere in the world has IT investment of this nature been shown to be cost effective.

Mr QUICK—I think it would eradicate a whole lot of quangos that are out there at the moment busily handing out research money and pilot project money. The need would not be there because each of these little towns with their five, 10, 15, 20, 50, half a million have got the services in there and they would be up and running.

Dr Alexander—The problem with that argument is that it is happening anyway. In a way, what we are talking about is how to organise it happening rather than whether it should happen. Irrespective of our personal opinions, telepsychiatry is operating. Everyone examining it thinks it is a damn good idea. I think we are past the point of that argument. In fact, I can absolutely understand the academic background of the argument because the literature says that it is true, but it does not reflect the reality of what is happening. The reality of what is happening is that—

Mr KERR—People may absurd and irrational decisions and pursue them ruthlessly in politics regularly. I mean, this is not necessarily a course that would not be advised by us but I would like to know that there is some sort of measuring stick that people could put forward that talks about whether it is a rational or social investment. The fact that people are doing it already is fine and I agree with the Net. I have no problem with trying to get a common protocol so that you can have less of this nuisance of interfering systems and can get over some of the privacy objections and all those sort of things, I have no objection to that, but I must admit I have an enormous scepticism still about any public investment in the infrastructure itself.

Mr Scott—I agree with you up to a point. The critical issue here about tying investment into return is to actually use the paradigm of the health communication service because it stipulates in a very concrete fashion what we are actually trying to accomplish. Using a telecommunications model means that you have accounting data which automatically leads into resolution of the complex funding problems that arise. Using an incremental approach, albeit one which understands that we are going after a sector as large as health care, and we are going to work collaboratively on it to do that, means that you can actually achieve the focussing of investment and simply move away from these pilot projects which are done in such an uncoordinated, unprofessional manner in many respects from the point of view of investment in infrastructure.

There is more than adequate funding around. I am embarrassed to say that I was involved in a number of grant applications, particularly in the networking area when I was in the Commonwealth health department, and we simply did not have the expertise. We tried to pick out those which were the greatest threat and potentially the greatest benefit for special attention, but much of the other money was simply doled out on the basis that it sounded like a pretty good project based on what people were trying to achieve. But

they simply had no infrastructure to harness what were really good intentions and good ideas in a way that actually lead to incremental evolution of a new infrastructure.

What we really keep coming back to is finding a framework which promotes collaboration but also integrates with the serious business of telecommunications, traditional computing technologies and large scale investment, where people outside want to put the investment in health care but simply have no way of productively engaging in dialogue with the health sector about where that investment makes sense.

Mr KERR—I am curious as to why it is different. Why is it that the information industry, which is very good at making a buck out of almost anything that moves, can't have a conversation with doctors? They can with lawyers. They can with engineers. Why can't they have a conversation with doctors? Why can't they also have a conversation with consumers? If there is a buck in it or if it makes things more efficient, why isn't it happening? This is another way of formulating Harry's question, but I do see the need for a common protocol. It may be that that is part of the reason, but in other sectors that hasn't prevented that dialogue. The privacy issue is important but it is equally so in a whole range of other disciplines.

Mr FORREST—I used to be a consulting engineer—and I hate to be a bit heretical here—and if someone rang me up with a problem and asked for my professional expertise to solve it, I would give them a quote and say, 'For this price I will fix your problem,' and off I went to work. That may have included teleconsulting with some professionals of my own who I had to pay. At the end of the day, I fixed the problem and I got paid. If we can do that with engineers, as Duncan has said, why can't we do it with doctors?

Dr Cromwell—We could do it with health care communications, including with doctors. Doctors know very well what it is that they have to be able to send to somebody in respect of a patient and what they wish they could receive from somebody else in respect of a patient. There is simply no place that they can go that can organise all of those other doctors so that they are sending and receiving, in a trusted fashion, to the privacy requirements of someone who does not want an HIV infection advice to accidentally fall off the back of a Department of Social Security computer in the middle of a prison some place. The reason why computing people don't talk to health care people, broadly and commonly, is because before you can talk to health care people you have to understand that that is simply not acceptable. It just isn't. It may be collateral damage in other sectors, but it is not acceptable in health care to have any system which permits even that kind of slip-up.

Mr KERR—I can't believe that. We have collateral damage in hospitals all over the place. The literature is full iatrogenic medicine—the disasters of modern medicine. Modern medicine has accepted collateral damage from the day they discovered any drug. It has all been put on the market on the understanding that all care is taken but that at the end of the day, you can only test to a certain degree. That cannot be a sufficient answer.

There are security systems, electronic passwords, a whole set of degrees of sophistication, but any reporting system is going to fail. Paper reporting systems fail regularly.

Dr Alexander—I have two comments. One is that in most health care environments the funding is allocative and it is usually allocative in the final instance within an institution. Many of the communications that we are talking about are not within an institution. What we are talking about is analysing how someone might invest in something which crosses these boundaries where there is an allocative culture. It is not to do with whether doctors want to or don't want to. In fact, in many respects they do want to do a better job. They would much rather not have to fly to King Island, et cetera. But how practically would you organise that? It is how to cross those boundaries that we are interested in exploring. That is what we are talking about.

I do not think that within, let's say, the institution I work in, they alone can resolve the communication difficulties with GPs because GPs are being paid by a different, totally unrelated mechanism. In order to construct a communication service that makes sense between a major hospital and its surrounding practitioners, a new financial form is required. Part of our proposal is that we think we have found that form.

Mr KERR—It is almost a financial cost centre argument, isn't it? The individual practitioner has an interest in certain things and the individual hospital has an interest in certain things. They assert they have a common interest in the patient.

Dr Alexander—That is right.

Mr KERR—But because there are no mechanisms for channelling an apparent efficiency gain in a way which fits a funding structure, it just has not happened.

Dr Alexander—That is right.

Mr KERR—If that is the case, then your solution of just setting up a framework won't work.

Dr Alexander—It will if it directs dollars into it from outside.

Mr KERR—That is what I am saying; there is a great scepticism about putting public funds into a framework—

Dr Alexander—I do not think we particularly argue that it should be public funds.

Mr KERR—Where would it come from?

Dr Alexander—We think there are many, many rich sources of investment dollars who think they can make something out of this.

CHAIRMAN—For example?

Mr KERR—If the reason structurally for this not happening is because you have got these different cost centres, unless you shift that, why would somebody say, ‘Well, I’ll break through’?

Dr Alexander—Certainly; that, of course, is the argument that is driving coordinated trials and those kinds of structural changes. I absolutely agree that that agenda should be in common with this agenda. One will follow the other.

Dr Cromwell—There is another level to that. The other thing that is missing is something like revenue centres. In fact, what you find is that you can combine those players in that particular service between GPs and hospitals and perhaps clinics so that you have what is effectively a new cost centre—a health communication service cost centre. You can then create an umbrella, such as the one we proposed some years ago which was called the national health communication network. You could use that one; you could make another one. But you would then have an umbrella which could aggregate several cost centres across people who in the sector normally did not coordinate with one another. They could be from other states; they could be from other jurisdictions; they could be from other specialties; they could be from private hospitals and some from public. If you simply had an umbrella in which you could aggregate those cost centres, you could then create a sufficient attraction for a supplier to see a revenue stream off the margins of supplying all of those.

The G7 telehealth proposal was tabled for the committee earlier. That included in it the basis for this kind of a funding argument. In fact, at the early stages of that, as it was preparing to go to France, there were discussions with financial investors in Australia who would be absolutely delighted to look at the case for investment. We are not talking about technology companies. We are talking about money people who said, ‘Are you kidding? You can do a return over 15 years? We’ll be in. No one ever organised it before in this way.’

If you use that model, that is in fact where the gains came. In effect, if you look at it from their point of view, there is a satellite, there is a network, there are some other things. They source the gear, nobody else has to. They figure out how to subcontract the switching and everything else. It is all there, anyway. Then they get a little bit from video tele-psychiatry from remote areas. They get a little bit from tele-pathology. They get a little bit from saving on a bit of transport. They get a lot every time somebody saves a \$30,000 air ambulance ride. They were actually quite excited.

Of course, their contention was that if this were a genuine public-private hybrid, that is, if they were protected on the commercial side by law, according to the investment that they were risking, in the same way that the states and territories of Australia would have to be protected by a surety that services would continue to be delivered regardless of whether a satellite fell out of the sky, then they were delighted.

One of the things that is driving this and drove that here in Australia, and the Health Communication Network, as it came along, is the understanding that these are the things which are proving the way overseas. In fact, overseas, they actually leapfrog the problem of, 'Could you put a price on the fee?' Like everywhere else, it is just hard. So they said, 'Okay, let's not price the fee across the whole system. Let's just narrow it down to the service that is being provided and let's price that.' People have visited Australia to see how Australian Medicare does it; it is quite famous in parts of the world for helping care for the citizens for such a tiny amount of GDP. How does it manage it? How is such a thing possible? Other countries have committees like this where everyone sits down and agrees at the outset, 'Well, we know such a thing as that is not possible, so let's see what we can do.'

Part of what we are exhorting the committee to consider is this level of national leadership. Don't discard the evidence that these things can and would be done and are organisable. But we would ask that they be thought of on the basis of how to organise it with the players who stand to gain, not on the basis of how government should figure it all out beforehand. Business people don't want to come and take your money any more. Some of these businesses are so big, they are as big as countries. They are truly now in it for the long haul. Their own investment periods are 25 years, just to get projects up. This is what it is like out there.

In the next couple of years there will virtually be only six telecommunications companies in the world. This is what is happening. You want a way to think how to do it, how to get them and how to make sure that it has the okay of the national government of Australia.

CHAIRMAN—Thank you very much, gentlemen. Perhaps that is an appropriate place to wind it up. We have gone well over time, but I think that obviously indicates the interest that your submission has generated. We appreciate your appearing before us. You are welcome to stay for the rest of the afternoon.

[2.32 p.m.]

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

DALY, Dr Michael, Member, Committee of Management, Melbourne Division of General Practice Inc, 55 Melrose Street, North Melbourne, Victoria 3051

MARTYRES, Dr Raymond Francis, President, Melbourne Division of General Practice Inc, 841 Rathdowne Street, North Carlton, Victoria 3054

RUTHERFORD, Dr Angela, Member, Melbourne Division of General Practice Inc, 212 Blyth Street, East Brunswick, Victoria 3056

WYMAN, Mr Kim Thomas, Executive Director, Melbourne Division of General Practice Inc, Yarra House, Fairfield Hospital Grounds, Fairfield, Victoria 3078

CHAIRMAN—Before we ask one of you to deliver a brief opening statement, could you tell us the geographical area covered by your division?

Dr Martyres—The area is the CBD and the surrounding suburbs. It starts about two kilometres south of here, in Richmond, goes to Port Melbourne, right up to Brunswick and down to Abbotsford.

CHAIRMAN—How many general practitioners would be—

Dr Martyres—There are 570 general practitioners. Out of those, close to 70 per cent are members of the division.

CHAIRMAN—We have had a number of other divisions appear before the committee at earlier hearings. We were impressed with their practical hands-on approach to the problem. Could one of you give us a brief opening statement and then we will proceed to questions?

Dr Martyres—We thought we would bring together the membership to this committee because we have a sole general practitioner, Dr Daly, who is not computerised and has got views about it. Dr Rutherford and myself run fully computerised medical practices. We have been working within the public hospital system, both in private and with the state and federal governments, in relation to Information Technology and information management, and we have, over the last three years, developed views about it that we think may be helpful to this group.

CHAIRMAN—I was interested to read that you say that the costs of hardware, training, software, all of those things, are serious impediments to computerisation. What

you are really asking for would be some kind of government incentives. At an earlier public hearing we actually had some evidence of a cargo cult mentality amongst some sections of general practitioners. Apparently there is this rumour spreading around that the Commonwealth is simply going to come and give each practice a computer. I suspect that is not going to happen, particularly in the current budgetary arrangements, but I am certainly sympathetic to incentives, whether they be of a carrot or stick nature.

I think when one looks at the idea of computerisation it is a wonderful idea—very important, and very important for the community—but you are asking for special incentives that are not available to, say, lawyers or to other professionals to computerise. I think, personally, and I would be interested in your comments on this, that we ought to have a common approach across basically all the professions, and it would be unfair to give you special incentives. Now I do not know how you feel about that.

Dr Martyres—If I could answer part of that, and Angela answer the rest, we will start from the premise that a lot of work that general practitioners do is not remunerated. There is a lot of other than face-to-face work with liaison, management of patients, arranging patient care that is not remunerated. Now if we add a computer and Information Technology into that already existing milieu, we will disadvantage GPs further. We need to have a system which either involves giving general practice and practitioners incentives to computerise and is paid for by other than the general practitioner or by some form of tax relief, or we have a system where the medical benefit schedule list changes to allow for interaction between service providers. If I spend 20 minutes talking about a patient over some form of IT with a public hospital I am not being paid for that time. That is a problem that has to be addressed.

CHAIRMAN—There must be no provision currently.

Dr Martyres—There is no provision, so we are coming from the other end to say that if we are to computerise, and we think it is a good idea—

CHAIRMAN—That is not much to do with computerisation. You would not get paid if you picked up the phone and rang, or if you, in primitive days, walked around the corner to the hospital and had a personal consultation. You still would not be paid.

Dr Martyres—Yes.

CHAIRMAN—And if you had to do it in that instance the remuneration issue is separate from the issue of computerisation in a sense, although perhaps it brings it to a sharper focus.

Dr Martyres—It does, and so we are addressing the remuneration issue in other fora through the coordinative care trials and the medical benefit review that is under way at the moment. The issue then is that, for GPs to put computers on their desk and practise

medicine in a high tech environment, they need incentives to do so because it will disadvantage them further if they just do it and, unless there is a partnership in understanding between the stakeholders that want computerisation and in getting the GPs to do so, then we want to be talking a common language.

CHAIRMAN—You seem to be suggesting here that there should be a number of incentives, and in points one, two and three you outline what those incentives are. Do you think it would be feasible for any government to give you incentives that are not available to other professionals?

Mr Wyman—Could I answer, since I put that together. Firstly, the argument that the law is the same as general practice and medicine is clearly not as straightforward as you would suggest. Three-quarters, at least, of the fees in the health business do not come from the private paying client. It is a more structured profession in terms of what is feasible, it is less a free-market profession. That is all I am saying. However, we want to add to this the proposition that what GPs are about is to improve the quality of care and to do it within the kind of cost efficiencies that the state and the private purchasers can afford to pay.

We want to put to you that there are direct benefits from GPs being assisted in their computerisation. Where it stands at the minute—I am sure you have heard this statistic before, but it is through our research and the stuff that we have done—is that the majority of GPs have a box in their practices but very few of them use it for any clinical purposes; only 10 to 15 per cent, depending upon the area. I think what we wanted to put to you by the blend of the professionals who are computerised and who are not is: what are the gains and benefits and what are the shortcomings? Would you be prepared to hear that kind of proposal?

CHAIRMAN—We have got two computerised practitioners here and one practitioner who has not yet computerised. The two of you were obviously prepared to computerise. Given the current situation, why have you done it whereas Dr Daly did not feel that it was necessary? And yet, what you are really asking is that we should give others the incentives you did not have.

Dr Rutherford—I will outline my decision and the reasons for it. I was in a fortunate position of starting a practice from scratch about nine years ago. I had previously worked as an assistant in other practices and I was aware, through other contacts, of the development of word processing and computer data management in other industries. It looked to me that there were better ways to manage the information—the data that comprises a patient's medical history, the office management of an appointment system, the billing and receipting and so on—than the old paper style.

I decided at the outset that I would do that so I started in a small way with a medical software supplier with whom I still have connections. Because I was starting and

not expecting much income from the outset, the system and I could grow together. It is now at a point where there are two full-time practitioners using the system and the rewards on a day to day basis for myself and my colleague, for our patients and for our staff are that we have a very clean, efficient management of all those aspects of a practice. When a patient rings for an appointment it is easily done, it is easily transferred; there is much less likelihood of slip-ups, there is no untidy appointment book cluttering the desk. When patients arrive they sit in our waiting room which is electronically monitored. I can see who is there, how long they have been waiting, how abject my apology should be when they come in because of the duration of time they have spent there.

CHAIRMAN—You record in the computer the time at which a patient arrives?

Dr Rutherford—Yes.

CHAIRMAN—That is very good. Perhaps parliamentarians could adopt a similar practice in their offices.

Dr Rutherford—I can preview their history electronically before they arrive and that includes their demographic data, their outstanding recalls—whether they are due for a pap smear, a flu injection or a priority review for some other condition. For instance, a patient has indicated that they are depressed and I may have started prescribing antidepressants; I can review that.

The patient knows when she comes in that all the history is there at my fingertips, and they do express appreciation of that—not very often, but often enough for me to feel that it is noticed—and the prescribing, of course, is linked with the record. If I have entered that the patient has had drug allergies in the past, I am prompted what those are prior to proceeding with a prescription. The database, which is supplied by MIMS through my software supplier, is a standard commercial drug compendium, a list that throws up potential interactions. So I feel there are many sorts of checks and balances to my day-to-day operation.

When I am called on to give reports to solicitors or the Department of Social Security or whatever, then I can do that by downloading the relevant section of the medical record to word processing, adding a few lines, and I have got a much neater output that is comprehensive and a much less frustrating time for me.

CHAIRMAN—And you did not feel that the financial costs were such as to inhibit you from undertaking this proposal?

Dr Rutherford—I have reviewed them. No, I did not feel that at the outset because I felt that it was a bit like choosing to work out of redecorated premises rather than undecorated ones. It was better to do things a little bit cleaner and neater.

CHAIRMAN—You would have got a tax deduction for lease payments or for depreciation or whatever?

Dr Rutherford—Depreciation and so on, yes. Not for staff training and staff retraining. Each time I recruit a new receptionist—although it is a small practice—we wear the cost of employing a part-time manager who has the flexibility to be involved in staff training when that is required, along with all the other things that she does. The only way the practice generates income is if I and my colleague are seeing patients face-to-face, so there is a priority that we are not deflected away from that activity by the other activities.

CHAIRMAN—Are you a bulk-billing practice?

Dr Rutherford—A very important point. No, I am not, and 80 per cent of my patients are private fee paying, and that comes back very keenly to the issue of costs.

CHAIRMAN—The Health Insurance Commission told us some time ago that it cost 30c, approximately, for them to process an electronic claim—that is, a bulk-billed claim—but it costs \$1.80 or thereabouts to process a paper-based claim. Now if the government were to permit non-bulk-billing doctors to bulk-bill the Medicare rebate proportion of the bill, and then collect the balance from the patient, do you think that if, for instance, the government paid you by return, overnight, or in two days, rather than making you wait the 14 days or thereabouts I think it is now, that that of itself would be another incentive for practices to computerise? The government would be saving money because it would be dealing with more people electronically—

Dr Rutherford—Yes, I think that would be—

CHAIRMAN—and it would be giving something back.

Dr Rutherford—That certainly would constitute an incentive. Presently, and the other doctors may care to comment, my manager spends a certain amount of time each week rectifying errors in Medicare rebate cheques, the batch payments. We did briefly flirt with Medicare claims directly and found at this stage that, because our proportion of accounts for direct billing is relatively small, there was a disproportionate amount of time required in ironing the glitches, of which there are still many—some every week—and we have not proceeded that way at present.

CHAIRMAN—And, Dr Martyres, how does your experience relate to that of Dr Rutherford?

Dr Martyres—I have a similar computer software package, and the cost was significant. It is about \$15,000 to \$18,000 to—

CHAIRMAN—For the software?

Dr Martyres—And the hardware. And you have to run a network within the surgery, too.

CHAIRMAN—But how much of that cost would have still been incurred had you been using the computers merely for medical administration, rather than for clinical purposes?

Dr Martyres—Not much of it in the sense—

Dr Rutherford—Probably about one-third.

Dr Martyres—Yes, one-third. One can get a simple computer to do word processing and an accounting package to go with it. In fact, a handwritten system, which is hardly \$1,000 a year, is pretty effective when you just write it out by hand and give the receipt or the account to the patient. I have not gone into the electronic Medicare claims system because Medicare has not got itself organised in a way that is user friendly. So, when Medicare makes mistakes, it takes months to correct. If I make a mistake, it takes 24 hours for them to tell me that I made a mistake. The issue for me is that it is not cost effective to direct bill even though it may be cost effective for the Health Insurance Commission.

CHAIRMAN—And, Dr Daly, why is it that you have not computerised whereas your colleagues have found that it has been advantageous to do so—and would you like to?

Dr Daly—When our executive director indicated that I was not computerised, he meant that I was not computerised in terms of using the software for clinical purposes. I actually do have a computer on each desk in my surgery, but I have not bought the medical software packages to use it for clinical purposes. The reason I have not done that is because I have not been convinced that there is going to be a cost benefit for doing that.

I am in solo general practice, as I have said, and I am very conscious of the business side of my practice. I am not going to outlay a significant amount of money unless I am sure that there is going to be a definite cost benefit, meaning that over the estimated lifetime of the software and the hardware that I am going to in some way recoup the costs of that outlay. Now obviously there is an argument of quality. One might argue about software and computerisation improving quality, but I can see other ways of improving my quality other than buying expensive Information Technology.

CHAIRMAN—We have had someone appear before us, I think it was someone from the company Medical Director, who said that the software was almost given at a very low cost. It was only for prescribing—sorry.

Dr Rutherford—They use drug company advertising with that which many of us would not feel was an appropriate thing to have on your desk every day.

Dr Daly—It is not just the initial set-up costs of the software which, as you correctly indicate, is free for some particular packages; it is also the time involved in keying in the data and in using the software. As I said, I am conscious of the business side of my practice. I am a bulk-billing only doctor. I can see that the introduction of that software would place a risk that might significantly slow down my consulting time.

At this stage, since writing the submission, I have taken a tentative step towards computerising in that I did hire a programmer to write me a program that will sit on top of Microsoft Access database, and that only cost me \$200. I am now keying my patients into the database. That helps me with retrieving Medicare numbers. That actually is definitely cost effective because, prior to setting up the database, I had a huge big folder that was about six inches high with names and Medicare numbers of patients.

I have a rather unusual type of practice in that maybe up to about 20 or 25 per cent of my patients are seen not in the surgery but outside in institutions or on home visits, and I need to store their numbers because they are homeless-type people and they often lose their cards. So that is another reason why a nice little software package which allows 15-minute appointments, et cetera, does not really suit me. I do not take appointments at the surgery because it is such a chaotic waiting room environment.

Ms ELLIS—Excuse my ignorance, but when you say ‘clinical use’, what do you mean? Can you define for me what you mean when you say—any of you—like Dr Rutherford, that you have used your package, your computer, as you say, for what I would consider clinical, in terms of medical background, reactions and so on for patients in a medical sense? So what are we talking about? Are we talking about what I would term purely administrative, and when and how do we get to the clinical level in the use of your machinery and computers just so that I can understand what we are referring to?

Dr Rutherford—When doctors use that term we do mean recording patient medical information. I actually type when I am talking to someone and I do not write by hand. If my medical record is subpoenaed, I print it out. It is all electronic.

Ms ELLIS—So that is what we mean when we talk about clinical usage?

Dr Rutherford—Yes.

CHAIRMAN—Is this all internal practice management?

Dr Rutherford—Yes.

CHAIRMAN—So you do not have modem links to—

Dr Rutherford—I have a modem linkage to home so that I can take after hours or weekend calls and dial up that patient's record.

CHAIRMAN—Not to specialists or to—

Dr Rutherford—No.

CHAIRMAN—You cannot, say, give a referral to a pathologist by a computer link or anything of that nature?

Dr Rutherford—Not yet.

Dr Martyres—We have a system now where two pathology companies are prepared to download their results onto our computers. We then tick them and make sure they are all right before they are put into the patient's record. The way health is evolving in Australia—like in other OECD countries—means that there has to be some integration for it to be more cost-effective. If that does not occur, there is going to be intervention that is not going to be liked at various levels. This is of concern to general practice because then general practitioners will be marginalised. We would like to be involved in leading the discussion of how that integration should occur. There is no doubt that you would have heard that systems are in place in various organisations that are willing and able to interact with institutions and organisations outside their premises. The problem we have is that there is no policy for that to happen.

Mr KERR—I must admit I am a bit of a blow-in here. This is the first day that I have participated in these hearings and I apologise to my colleagues for occasional bouts of ignorance. But in the evidence I have heard and read in the papers, everyone says, 'Doctors know what they want and if we could only clear up the issues of protocols and things of that kind, it will all happen.' To get clear in my head the sort of things that could emerge, as primary health care providers, casting your minds into the future, what sort of things—and you who are not involved yet might like to think about this too—would you like to be able to do by computer? Then we can start to think about whether it is going to be worth us pursuing those things to enhance your practice.

Are you talking about being able to consult specialists on-line; are you interested in being able to seek from, say, some sort of verified information system up-to-date medical practice information; do you want MIMS and all of those sort of things up to date on computer so you can draw on those quickly; do you also want your patients to be able to access you electronically and, if so, for what? I do not really know what we are talking about here because people say, 'Oh, it's going to open up all these fields and new opportunities.' I must admit I am still sceptical.

Dr Martyres—Can I answer that at two levels: one is what would be ideal; the other, what is achievable. The ideal means that we need a structural change to occur in

Australia. You have this big umbrella which involves protocol encryption, putting a computer on a desk and making sure it all happens. You have all your policies in place, you have your protocols in place, you have security confidentiality, you have the whole bang, and that is going to take 20 years to achieve—and will be sitting doing nothing. That is the macro view.

The micro view is that you start with little achievable things and you build modules on them. Both are valid and you have to deal with both together. What is ideal would be that you walk in with your Medicare card, or whatever card you want, you swipe it at your doctor's desk and you have the information downloaded from that card onto your computer. The patient walks in, the registration is there, you have got the full history of that patient at your fingertips, you have got their drug interaction, and you have got all the individual issues on your computer in front of you.

You would then know if they are taking any drugs. You know which providers they have visited in the last year. You know if they have gone into hospitals. If you want to access their records out of the hospital you can do that. You have their pathology results; you have their family data; you have everything there, and you just need to access it. When you have finished with them you swipe their card again and they walk out with their card. They go down to the chemist and the chemist swipes the card. Your prescription is there on the card and the chemist knows. That is the ideal world—and it is achievable.

Mr KERR—When you say they walk in, do they need to walk in? I mean one of the—

Dr Martyres—Yes.

Mr KERR—I have got to ask you this because very soon people will be able to have video phones. You will have it in your practice almost inevitably because it will be in your house. As you are amongst the group in society that are relatively high income earners, it will just be a part of your household appliances, I imagine, within 20 years. Why can't somebody say, 'My little boy is in bed, he has got a fever of 105'? You have got most of his medical records there, so you have a look at the child on a video screen. You may decide it does need a home visit or something of that kind, or for the child to be brought in but, if the child does not come in, why can't you complete the consultation there?

And the same with Dr Daly. When Dr Daly goes out on his rounds and sees this poor homeless person lying in the gutter, he has his Apple notepad, scribbles a note on that back to his own electronic computer—

CHAIRMAN—His Medicare machine.

Mr KERR—And his Medicare machine, and deals with the whole thing there and then—processes the whole thing at that time. Maybe those things are possible too. I do not know, but I am just asking whether you envisage those things happening in the future?

Dr Martyres—I do not. I think most general practitioners would agree when I say that 50 per cent of the consultations that occur with patients are not to do with what the patient is there for. The softer relationship issue is what defines the consultation. So, if you have a video looking at a patient's face in their home, and you have no other cues given to you except that image, you would be treating the wrong problem. A patient may walk in saying they have got a headache, but what you are dealing with is depression or a grief reaction or they are worried about something. The cues that GPs get by having that patient in front of them and getting the eye contact in a human way is what gives us the cues that allow us to use our intuition to get into this relationship with the patient, and I think most people, including myself—

CHAIRMAN—We have just been hearing evidence from psychiatrists who say, 'Look, if I can get this person up on the screen I can diagnose not only sniffy noses but the most intimate sorts of psychiatry issues.' It is puzzling.

Dr Rutherford—But the psychiatrist knows he is dealing with a psychiatric problem at least because he has already been screened by a primary care provider who has made a referral to a psychiatrist. The GP is dealing with the undifferentiated problem. He might have a headache, but it might be something else, and so you are involved at a much earlier stage in problem solving.

Mr KERR—With a seven-year-old child, I get really annoyed if you can't just ring up and say, 'Look, should I be able to bring them in?' After hour care provision is appalling at the moment in Australia. The days when doctors would come out routinely after hours and make a prognosis—

Dr Rutherford—I think it has to be said that partly it is because GPs know that we are selling our services whatever way we do it, but we only can bill for it if we see you.

CHAIRMAN—If you think 'Change the medical benefit schedule to allow for certain other exigencies and needs', then you might find that the truth might end up being half way in the middle. People might mostly come and see their practitioners, but there will be circumstances when Duncan will dial up on his video phone and get a consultation over that.

Mr KERR—I do not know, but I just say that I would like to be able to think that this gave the patient greater flexibility also. I mean, medical service provision for the patient is pretty good in Australia, I think, compared to most places, and I have travelled a bit and I have seen how difficult it is in some countries. But it is still not what it might

be, I suspect.

CHAIRMAN—Dr Rutherford said that the real reason medical practitioners would not like to see it done is because it does not help you maintain and build your practice. I suspect that, as a community, we might move forward and find something that is satisfactory to you and to the patient.

Ms ELLIS—Dr Daly, in your letter you mention the development of this shareware program that you are working on, and you also take into consideration link-ups, not just with government departments but also with the PBS. In earlier hearings of this committee, we have had Pharmanet mentioned to us. I am wondering whether you are aware of the developing technology in terms of Pharmanet. Has it been mentioned in this inquiry, in the other inquiry or in both inquiries, Mr Chairman? I think we have had Pharmanet mentioned to us in both inquiries. It is a proposal to link all of the pharmaceutical network into the medical network in a way that I think you may be alluding to here. I was wondering whether you were aware of that, or whether you see what you are doing as a different or additional thing?

Dr Daly—I am glad you asked because my other main message that I wanted to give to you today was that, in my opinion, the most important role for government in encouraging the role of Information Technology in medicine is to set the communication protocols—to determine how data is to be organised and how it is to be encoded. This has happened with the Internet and with modem technology, and those areas have just taken off. Once that happens and someone says, ‘Right, this is how it is to be done,’ then that will place constraints on the software developers and on anyone in the Information Technology industry who wants to develop software, and we will all start talking to each other. I do not think that is going to be too expensive to do. I see that as the main role of government. I might be wrong, but I think once that happens everything will start to work.

Ms ELLIS—So what you are basically saying is that someone, for example government, has to draw the parameters around which control can be put in terms of privacy, access and information flow, and then, in your opinion, once that has been done, the development will go accordingly.

Dr Daly—Exactly.

Mr FORREST—On that question of privacy, I would like to ask Dr Rutherford a question. It is good to talk to some hands-on practitioners who are actually trying to make this stuff work. The committee has heard a lot of confusing evidence on the issue of privacy and so on, but obviously you must have to back up your database for security reasons and that has to be stored. So, in reality, nothing really has changed—your previous paper record was always there like that and someone had to monitor that. The issue of privacy is really a red herring, isn’t it? It is just an excuse not to proceed. I have certainly picked that up from what I have heard in the last few months.

Dr Rutherford—Yes. It is interesting that, under the paper records system, within the four walls of my medical practice, my staff was regularly opening those paper records, date stamping them, entering pathology results and they had my handwritten sheets or my colleague's handwritten sheets. Part of their job was to keep all that information tidy. If you dropped it on the floor, it had to be sorted out. So there is a sense in which the patients' personal information is accessible only to the doctor who has the password to log in. Clearly, that is myself and my colleague. The cleaners do not have access to it, but it is accessible in a different way to someone with computer knowledge. I think the issues are different. The mechanism of accessing the information is different but there are still problems.

Mr KERR—Certainly, the biggest issue with privacy that may emerge is not so much protection in that sense but whether or not we actually develop a public exchange of patient information between medical professionals. As was suggested earlier, there are instances where people wish to go to a different doctor because they do not want a particular symptom disclosed to the family practitioner—something of that kind. How would you exclude that from a distribution network that would be generally of benefit? Supposing that I were hit by a bus in Melbourne where I do not have a GP, or any medical record. There would be no medical records held here, but it would be good if the hospital could immediately access them electronically to know whether I have any allergies to drug treatments, or whatever.

I suppose I take the privacy issue relatively seriously in the sense that I accept that there are going to be some instances where people do not wish to disclose particular aspects and have them put them on a quasi public access network. I wonder how we deal with that. I think that, generally, most people would want their information to be able to go onto that quasi public network for health care providers. Supposing that I happen to be in the Northern Territory and I become sick. I should be able to go to any GP and say, 'Pull up the information on Dr Rutherford's patients.' Maybe there should be a fee to Dr Rutherford for accessing that but, generally, why should you not be able to pull it up straightaway without any need for consultation? If it is midnight you should not have to ring Dr Rutherford. I might not be able to speak, but if you know my name and my provider number, you should be able to access the records and find this out. It would be of benefit generally.

Dr Martyres—Can I make a couple of comments in relation to privacy and what you have raised. Privacy is not an issue and has never been an issue with general practitioners because we act in the best interests of our patients. It is when we do not act in their best interests that it becomes an issue.

Mr KERR—It becomes an issue if you act against my instructions.

Dr Martyres—Sometimes GPs act despite their instructions and that is still in the best interests of their patients.

Mr KERR—I could still see—

Dr Martyres—Yes, I know you could. The issue—

CHAIRMAN—And do so effectively.

Mr KERR—I might want to extract a very large amount of money for such a deliberate contempt of my privacy obligation.

Dr Martyres—However, the point I want to make is that the potential in IT for abuse when someone does want to abuse it is immense compared with a paper record. You can access very quickly and effectively everything you want, and that is what generates the fear in relation to privacy because seemingly there is no control.

In relation to the issue of interaction, the same thing applies. I think that computerisation has developed with codes and encryption that will allow the effective transmission of confidential information effectively. However, there is no guarantee. If one really wants to get in there, one can. There are a lot of instances where general practitioners will tell you that if the police want to get Medicare information that is private, they will get it and that is available. You just need the sources. That is what it comes down to. It is the intent that is to be used for that is the problem.

CHAIRMAN—Doctors and Mr Wyman, thank you very much for appearing before us this afternoon. We appreciate your contribution and we found that the practical hands-on experience you shared with us of immense benefit, particularly as you brought someone who is ‘before’ and two who are ‘after’, effectively. We hope that you proceed along the lines of computerisation, Dr Daly, and we will see whether the report assists you in some way.

[3.18 p.m.]

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

WEBB, Dr Stephen Philip, Principal General Practitioner, Manangatang Surgery, Manangatang Hospital, Pioneer Street, Manangatang, Victoria 3546

CHAIRMAN—Welcome. I do not think that I could pronounce the name of the town that you are from, but I suspect that our colleague, Mr Forrest, the member for Mallee would be able to pronounce it very well.

Mr FORREST—You have not heard of Manangatang?

Dr Webb—It is followed by ‘the centre of Australia’, usually, in my phrases.

CHAIRMAN—Actually, Mr Forrest was one of the people instrumental in getting this inquiry up and running. He has shown a great interest, particularly in the situation of people in rural and regional areas. I know that our colleagues would confirm that just when we have finished questioning a witness, John will inevitably and invariably come forward with a series of questions designed to try and focus our attention on the problems of rural and regional areas.

Ms ELLIS—That is absolutely true, particularly in Mallee.

CHAIRMAN—Particularly Mallee. Over and over again.

Dr Webb—And so he should.

Mr FORREST—It helps having Harry on the committee. His mother lives out there, as well.

CHAIRMAN—I do not know whether you have declared a personal interest. The other thing that is very interesting about Dr Webb’s appearance before us today is that he is only the second rural practitioner to appear, so we certainly value his presence. I wonder if you would give us a brief opening statement. We have all received a copy of your submission, but you might like to elucidate some elements of it to focus our attention.

Dr Webb—The single thing that I can contribute most to this inquiry is the fact that we actually trialled a form of direct, general practice to patient teleconsulting service. To the best of my knowledge, at the time we did it, it was the first such service in Australia and, through literature searches, we believe it may even have been the first such service in the world. I believe that there is now a GP in southern Wales in the UK and

possibly a few in North America who have such services up and running. There may even be someone in Western Australia who has outstripped us now. But, at the time we did it, we used a system which is known within the IT&T world as POTS—plain old telephone system.

CHAIRMAN—So you have been using POTS but not ‘pot’, one would hope.

Dr Webb—There is a fair bit of it around up there, but I declined the invitation; I like to keep my brainwaves in an ordered sort of fashion. POTS is an alternative to the normally discussed form of telemedicine, which is ISDN linkage. ISDN linkage requires dedicated lines. It is fairly expensive, and I was hoping that I would be able to answer one of the questions that I heard raised by the committee earlier in terms of the economic costs. I have got what I believe is a fair assessment of the likely cost of a single consultation, which gives some figures and the justification for them.

CHAIRMAN—Tell us.

Dr Webb—Basically, a level B consultation for a vocationally registered GP is currently rebated at \$20.85.

CHAIRMAN—What is a level B?

Dr Webb—Level B is more than five minutes and less than 20 minutes. It is currently defined as:

‘Professional attendance involving taking a selective history, examination of the patient with implementation of a management plan in relation to 1 or more problems, OR a professional attendance of less than 20 minutes duration . . . ‘

A level A consultation is less than five minutes. So you are looking at a time interval of between five and 20 minutes. If you take a mean consultation time of about 15 minutes, the government-sponsored better practice program requires that an average rate of consultation should not be less than 10 minutes to comply with their criteria for good general practice. This can be assessed by the Medicare rebate forms that are submitted, because if you are submitting B level consultation rebate forms and you assume that each of those could be between five and 20 minutes, if you cannot divide the working day by so many of them and end up with a time interval of more than 10 minutes per form, then you do not qualify for the better practice program. You are really more of a sausage factory than a general practitioner.

CHAIRMAN—So you could not have a whole lot of 5½ minute consultations?

Dr Webb—No; you cannot practice medicine at that rate, it is not possible, not on an average basis. There are consultations that can be done at that rate, but not on average.

There are defined limits as to what the standard accepted good practice consultation would consist of.

CHAIRMAN—What does the best practice program give you access to?

Dr Webb—The better practice program allows access to increased funding which I believe is not added to Medicare benefit schedule fees but is directed at promoting such things as continuity of patient care by assessing how many different practitioners are servicing any given patient, which is determined by their rebate claim forms. If you exclusively service one patient in a financial year, they are regarded as one whole patient equivalent for your practice. If they see you and another general practitioner the other 50 per cent of the time, they are worth half a patient to you. It is then loaded on the basis of how rural your practice is, and there is a loading based on the demographic distribution of the patients. It is generally accepted that older patients and younger patients are slightly more challenging, so they are worth more than one patient. By the time you get a patient practice profile breakdown and you then weight them for their age groups and their sex, you can come up with how many whole patients you actually see.

The Health Insurance Commission provides a very detailed breakdown, which is determined by the statistics they hold and the Medicare benefit rebate forms that are submitted by patients attending you. If you are vocationally registered and you comply with some of their requirements, you are eligible for better practice payments which substantially increase your income. There is an incentive to practise good medicine. There is still a very hot debate as to what good medicine is, but they have tried to incorporate some of the factors that I suppose we all believe are relevant, such as continuity of care.

Going back to my original comment, allowing for a ten-minute average consultation, and the fact that, if you are going to be consulting by telemedicine in an area which is over 85 kilometres and less than 165 kilometres, which happens to fit in with Telstra STD cost brackets, the peak time cost for one unit of 25 cents will give you 43.5 seconds. If you are going to have a 15-minute consultation, it really means that the consultation costs \$5 in terms of its telephone connection cost charge.

At the moment, the Medicare rebate is \$21. If you add \$5 to that, and make it a \$26 rebate, you are remunerating the GP at a cost neutral basis to him for delivering that service, other than covering the overheads of practice computer hardware and software. Latest statistics I have seen suggest that 50 per cent of general practitioners are using computers for billing—in other words, they already have a computer—only 10 per cent of general practitioners are using that potential computing power for doing other things.

CHAIRMAN—Ten to 15 seems to be the range of percentages quoted to us.

Dr Webb—My figures might be slightly out of date. I think it is rising all the time.

CHAIRMAN—But not fast enough.

Dr Webb—But not fast enough. There is a huge area of potential benefit to patients that is not being tapped into. We found that by using the POTS system we were able to link up to one of the slightly more remote and primitively served communities in terms of the telephone network, of which Australia has one of the most sophisticated in the world. Even on one of the most old fashioned lines that we could find within our area, we discovered—

CHAIRMAN—Not a party line?

Dr Webb—Not quite a party line, we did not get that far. We discovered that if we can send a fax we can produce a slightly slow, refreshing but nonetheless acceptable visual image with real time sound and do an audiovisual teleconsultation.

CHAIRMAN—Perhaps not as good as face to face but a lot better than nothing.

Dr Webb—Absolutely. My main interest was to try to get some sort of funding for a pilot study so that we could look at the sorts of consultations that were a definite viability—what was a grey area and what was definitely not viable on a teleconsulting link. I think, within the profession, there would be no doubt that repeat prescriptions, blood pressure checks, diabetic reviews, where you are doing a blood sugar—things which involve fairly straightforward, simple physiological measurements—would be done by an on-site bush nursing registered nurse.

Our proposal was to set up a network through the already established bush nursing venues at small communities that would never have a chance of sustaining their own general practitioner because the community was too small and, using the on-site nursing expertise for all sorts of measurements, we could then, if you like, ship in the medical expertise for the consultation. If we felt that a patient needed an ear looked at, we could ask the nurse to look in the ear.

CHAIRMAN—But do you not think we are all piloted out? There have been all sorts of telemedicine pilots throughout the country. Surely, somewhere within Australia, that pilot has already been done?

Mr ALLAN MORRIS—He is asking for a pre-implementation trial.

Dr Webb—We actually put this proposal in September 1995 and have been knocked back on funding on two occasions and are still trying to construct the application in a way that would be acceptable to the appropriate government body to achieve funding.

CHAIRMAN—Have you been to see your local member?

Dr Webb—Yes. I think John Forrest knows more about this than anyone else.

Mr QUICK—What sort of cost are you looking at?

Dr Webb—At the time we originally submitted our request for funding, we were looking at \$2,500 per hardware end and \$2,500 per software end. So your minimum set-up cost would be two stations at \$5,000 each. For \$10,000 you can have a working system between two ends. In other words, if you add \$5 to the standard Medicare rebate for a face-to-face consultation and either change the legislation so that it removes the face-to-face clause or have a new item number which allows for telemedicine consultations, but you can simply work on the peak rate STD charges for the average distance you would be doing this.

I certainly do not regard it as a Pandora's box of unlimited funding because the government can very easily, through the Health Insurance Commission, link provider numbers which are both doctor specific and geographically specific to accessing those particular item numbers. At the moment the system exists in that only GPs who have undertaken additional training are allowed to offer extra services in the way of x-ray facilities. If you bill for those x-ray facilities but have not been licensed, the Health Insurance Commission computer rejects your claim. So there is obviously some way of linking the additional training or identification of specific doctors through their provider numbers with certain item numbers which patients who are claiming a rebate for services can get.

One of the things I might strongly point out is that when we are talking about rebates, that is for the patient, not for the doctor. The doctor can bill anything he wants. The doctor can bill privately for the services that we are talking about. Unfortunately, because the government is promoting a free primary health care philosophy through Medicare and bulk-billing clinics, patients do not expect to have to pay anything. If we had a slightly different—

CHAIRMAN—I don't think the government is promoting that free bulk-billing proposal. We certainly said we would preserve bulk-billing, but we have given doctors and patients freedom of choice.

Dr Webb—Yes. There is a subtle move towards trying to encourage more bulk-billing and patients certainly enjoy the idea of free at the point of service medical consultations. As a philosophical point, I might—

CHAIRMAN—They might enjoy it, but I don't suspect that it is something the government is trying to push.

Dr Webb—We might beg to differ on that philosophical point. The fact is that the community as a whole seems to perceive primary health care services as a free service. I

suppose to some extent, legitimately, they feel that they have paid in their taxes and, therefore—

CHAIRMAN—Are you a bulk-billing doctor?

Dr Webb—No. I used to bulk-bill 60 per cent of my patients and then, having been subjected to rebate freezes, I decided that it was not appropriate to regard my services as being devalued by the inflationary rate for two years consecutively.

CHAIRMAN—What some less ethical people would do would be to simply see patients slightly more often.

Dr Webb—Indeed, that might be one way of overcoming it, but I have a philosophical objection to that. I don't have a philosophical—

CHAIRMAN—I wasn't suggesting it.

Dr Webb—No, but my personal view is that people who receive a quality care service can be legitimately expected to contribute a small amount of money to that. I bill at a rate which would be totally amenable to the concept of co-payments which you raised earlier. I would be very happy to see the option of bulk-billing co-payments because I actually charge my patients \$1, \$5 and \$10, depending on their health care card or pensioner status. I would happily go to a bulk-billing system and use an electronic billing system, which costs the government 30c per voucher to be processed, if I was also given the leeway to make that additional charge which I feel is appropriate. At the moment there is a law against levying any further charge if you complete a bulk-billing form. You either charge the patient and cannot bulk-bill for the majority of the fee or you accept bulk-billing exclusively.

CHAIRMAN—Yes, I understand. I want to come back to what you said about \$5,000 at each end—\$2,500 by way of hardware and \$2,500 by way of software.

Dr Webb—Those figures are about 18 months old and they are undoubtedly reduced now.

CHAIRMAN—We have had all sorts of figures given to us on what it would cost for video link-ups. Yesterday we heard that a figure of \$20,000 would be all that would be spent to link up, for instance, a hospital at Horsham with this set-up that currently exists from Shepparton. Having said that, I suppose we really would have to look at the quality of the video connection. You say \$5,000 and I think that is about the lowest quote we have had so far. We did have up to \$60,000 quoted when we were in Adelaide. It dropped to \$20,000 yesterday and now it is \$5,000.

Mr FORREST—This is just using the old copper-based technology and no ISDN.

Dr Webb—The difference you have to recognise is that ISDN and POTS are two totally different services. ISDN will produce what you are used to as a television screen quality, full screen sized image. What I am talking about will allow you to connect to anybody anywhere with a telephone line that will take a fax message. It produces an eight centimetre square image which refreshes at the rate of about one frame every two seconds. It does, however, with a delay of about 30 to 90 seconds, depending on the quality of the line and the band rate—the rate of transmission of the bits of electronic data—allow you to do a snapshot which is a full screen image which can then be subsequently enlarged and only really is limited by the fact that pixel size then deteriorates from the quality of the image.

For 90 per cent of consultations—and I did a little anecdotal review of my own practice when I was looking at the opportunity of conducting this type of medical service—we do not actually touch the patient and we do not actually look at the patient for anything more than visual examination. There is obviously a fairly large amount of subliminal input in terms of body language and so on. But as we heard, psychiatrists are quite happy with the quality of information they can get and, as some of my GP colleagues said, we have to screen people with a little bit of a broader appreciation of what they may be presenting for. Undoubtedly there are a large number of consultations that do not need that level of sophisticated screening.

CHAIRMAN—I understand that, but apparently successive governments have had a program of upgrading the ISDN lines across the country. Given the fact that this technology—given the keen advocacy of your local member—will reach your area in the not too far distant future, what would happen to that \$10,000 of expenditure which you are suggesting should be used to set up a video link? Presumably it will all have to be junked and you would then have to start again with different equipment.

Dr Webb—In terms of the ISDN?

CHAIRMAN—What I am saying is that you are using an ordinary telephone line at the present time. The only higher quality line becomes available—

Mr FORREST—The software would deal with that.

Mr ALLAN MORRIS—Mr Chairman, I think you are talking about apples and pears here. What has been proposed by Dr Webb is, in fact, a relatively small amount of data being submitted relatively slowly, but sufficient to enable people to be helped.

Mr FORREST—That is all that is available.

CHAIRMAN—My understanding is that the reason Dr Webb is using this—and correct me if I am wrong—is that that is all that is available to you at the moment. If there was a higher quality line there, you would be doing something a little different.

Dr Webb—You would just use different software with the same computers and you would have a better quality.

CHAIRMAN—When the line is upgraded—from what Mr Morris is saying—you are saying that you would be able to use most of that \$10,000.

Mr ALLAN MORRIS—I am not sure if you would. I do not think that that is necessarily right.

CHAIRMAN—That was my question.

Mr ALLAN MORRIS—Let me try and probe that a bit more. What has been raised was the transmission, rotating and storing of MRI, ultrasound and CAT scans. I do not think that most GPs are going to want access to that kind of mass data. A hospital may, where there is a neurologist talking to a specialist centre. That next level up is more likely. What Dr Webb is talking about was actually a more basic level.

Dr Webb—Yes. We have attacked this from the basis of particular patients in our area, which is a very underserved and sparsely populated area. They have expressed a desire to have greater access or easier access to GPs. So we are doing general practice to patients, whereas all the other stuff is between general practice surgeries and hospitals or between hospitals or pathology servers and hospitals.

Mr ALLAN MORRIS—I thought what you were proposing there was firstly, what you are doing now—although perhaps faster and still the same line—or secondly, a registered nurse going out with a mobile phone and a laptop computer and actually transmit that way. She is acting as your eyes and ears, rather than the GP. That seemed to be more the thrust of what you were trying to do, that is, how to get basic services out to people who are ill somewhere away from the mainstream towns.

Dr Webb—Yes. There are many examples already in existence which shows that ISDN links between specialist centres and satellite centres of hospital nature are successful, readily accepted and very worthwhile funding. Nobody has really tackled the issue of providing primary health care services through this technique.

Mr ALLAN MORRIS—Therefore, that question on cost is actually quite different. What the doctor is proposing is actually a much more minimal system in terms of both hardware and software.

Mr QUICK—How many of those centres would you envisage? You were talking about community nurses in the area you are dealing with.

Dr Webb—We were looking at an area that is known as the Mallee Track. It has as a sort of medical provision centre Ouyen. Manangatang is one side of Ouyen and then

on the other side, going out towards the South Australian border as far as Murrayville, there are three small communities. There is Patchewollock further down south. The four smaller communities in Patchewollock are small communities that have currently medical services on the basis of the second Tuesday afternoon once a month, that type of thing. Ouyen is well staffed; Manangatang is well staffed, but people in the other small communities are looking at a one hour drive before they can get to see a GP. Our proposal is that with a telephone call, you can put a GP in their nursing centre.

Mr QUICK—How much is the all-up cost of your scheme?

Dr Webb—Most practices have a computer anyway, as we do, so there is no hardware cost there. You would have to buy the software for two ends which is \$5,000.

Mr QUICK—Why two ends?

Dr Webb—You need the cards, the camera and the modem facilities. The hardware/software package from Sharevision would be required at two ends and you need one computer for each venue you wish to serve.

Mr QUICK—How many venues?

Dr Webb—We were looking at a total of four.

Mr QUICK—What is the cost all up?

Dr Webb—You would be looking at \$22,000 and we could service somewhere in the order of 100,000 square kilometres.

Mr QUICK—And no-one will fund you?

Dr Webb—No. We have actually submitted an application for \$70,000, or we have nearly submitted it. We put it to field services and they said, 'You have got to revamp it a little bit.' The \$70,000 includes funding the GP time and, if we got a Medicare rebate for doing this, then that would come under government costs, not as a specific grant for doing this. Once your set-up costs of the hardware and software have been taken into account, this type of service would be self-funding, provided there was a rebate. We could charge the patients exactly the same as we do for a current consultation with \$5 more, which they would get back on the rebate anyway.

Mr FORREST—I would like to tease out the use of the old copper technology more. You have to use that because that is all there is and, whilst you say you got an effective result, what about the quality of the imagery you got? For example, you might be doing a diagnosis with lesions, bruises, cuts or something. If you wait long enough with a slow band rate, you can still get a good picture but only a still one.

Dr Webb—The example that was given earlier regarding flying somebody off King Island, that is the sort of thing we could give an extremely accurate diagnosis on or the requirement for moving the patient. In fact, I diagnosed a basal cell carcinoma. Of the four consultations we did, one of them was a trial run with our own chief executive officer and director of nursing, who stuck his arm in front of the camera about 150 kilometres away from me and said, ‘What do you think of that?’ We took a snapshot of it, enlarged it and I said, ‘When you come back, let me have another look at it, because I am going to cut it out’, and it was a basal cell carcinoma.

Mr FORREST—Which is?

Dr Webb—A skin cancer. If it was not cut out, it would eventually eat into the skin and the muscle and cause a lot of problems, but I am sure he would have turned up before that stage. In terms of being able to obviate the need for travelling to see a GP face to face, there are definitely things that can be accurately diagnosed because of the ability to do a snapshot. If you wait, as I said, about 30 to 90 seconds, you will get a detailed reasonably high resolution image. There are many procedures now which are done through scopes. You can look down orifices, up orifices and into orifices and the fact that the technician who is operating the equipment is right there is no different from if they were 150 kilometres away or halfway around the world.

We frequently use nursing staff for doing blood sugar tests, blood pressures and looking into ears. They can be up skilled easily to look into throats. Furthermore, if you can look into a throat, you can also pick up the very small camera and shine it with a light into the throat and say, ‘This is what I am looking at. What do you think, doc?’ You can snapshot freeze the image, have a look at it and say, ‘That is a tonsillitis. I am going to send you a script for penicillin’ or ‘Don’t worry about it.’ The ability to do fairly extensive, useful diagnostic and treatment protocols with teleconsulting really just remains to be explored. That is what we wanted to do, but we have not been funded.

CHAIRMAN—We are running short of time. I wonder if you could just keep the questions and answers fairly short.

Mr FORREST—I do not know why we have still got a hospital in Manangatang. What about radiology and CAT scan for pregnancies? Is that something that you can still get a good record with this old technology? I am grasping at straws because that is all we have got.

Dr Webb—No. If you are going to do medical image transmitting, you need the wider band frequencies. You need the ISDN. You would be sitting for a week waiting for a chest X-ray to come through. You could do it, but it is totally impractical.

Mr FORREST—So it is not a solution to the really big picture. It can get you a still photo, but that is about it.

Dr Webb—Yes. What we are looking at is a solution for the general practice to patient level of teleconsulting. This really has no application whatsoever between hospitals and tertiary centres. It does not have the data transmission capabilities.

Ms ELLIS—You made mention before about the cost benefits in terms of the Telstra \$5 cost. Do you have any other comments you want to make in relation to cost benefit? When I say that, I have in mind preventative health and the benefits of that, which some parts of the health bureaucracy and other parts of government find it difficult to deal with in terms of longer vision programming of funding.

Dr Webb—If you look purely at the economic cost benefits, my feeling is that, if Medicare rebate fees were made available, it would be a self-sustaining type of service. It is very hard to quantify cost benefits to the communities. We are all well aware of the fact that rural communities pay more for their petrol. They get charged STD rates for phone calls that are local call rates from one side of Melbourne to the other. They are already penalised on a financial basis for many of the services that urban residents take for granted at lower rates.

If you look at the cost of a family that has three children. They get sick with colds, get glue ears and infections and they have to run backwards and forwards to bring little children in to see the doctor. If you can provide that service reliably, which I believe would be possible, at a much more local venue for them, you are going to utilise the skills of the already present bush nursing sisters. You are going to save them time, save them travel and save them worry, because very often they will debate whether or not they are going to hop in a car at 2 o'clock in the morning and go a hundred kilometres. Whereas if it is 10 kilometres down the road and they can phone the bush nurse, she can have a look and if she is not sure, she can dial up a doctor and we can then provide that extra expertise.

There are many potential benefits to the community which would be very difficult to economically quantify, but there are certainly social benefits. I suppose I have a rather narrow perspective of a thing called the Health Act which states that every Australian resident, irrespective of their economic status, ethnic background or geographic location, is entitled to the same standard of health care. I have tried quoting this a few times and got nowhere.

Ms ELLIS—Keep quoting it.

Dr Webb—I am almost at the point where I believe that the government has a moral, if not legal, duty to provide this type of service on the basis of an act that they have enacted. When the law was enacted, the facility was not there. Now that the facility is there, it either has to be acknowledged and brought in within the scope of the act saying, 'We can deliver it, therefore we must', or you change the act to say that it does matter where you live and, if you live in these places, you are not entitled to the same

quality of care.

Mr ALLAN MORRIS—What about the one you are drafting now?

Dr Webb—It is going through the process of the divisions applying to what is called the SAPS. I cannot remember what that acronym stands for, but it is the standard state process of submitting general practice divisional projects through the funding system. There is only one funding system for general practice divisional projects and we just follow that protocol. We tried one or two other slightly different ways.

Mr ALLAN MORRIS—It should be argued as part of the state health infrastructure.

Dr Webb—It would be submitted under a special sort of clause.

Mr FORREST—Because it is still innovative, new and no-one has the confidence.

Mr ALLAN MORRIS—It should be seen in the same sense as a hospital, as infrastructure to provide access to services.

Dr Webb—There are a lot of things that should have happened, I believe.

CHAIRMAN—If on reflection you have some other points you would like to make following our discussion, feel free to contact the secretary who will pass that further submission around. We will receive it as evidence and we will certainly take it into consideration in finalising our report. Thank you very much for travelling all this way to be with us. We greatly appreciate it and it is good to have another representative of rural Australia here.

Dr Webb—Thank you for the opportunity.

[3.54 p.m.]

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

KIRKHAM, Mr Bruce Maxwell, Manager, Marketing, CSC Healthcare Systems, 7th Floor, 370 St Kilda Road, Melbourne, Victoria 3004

CHAIRMAN—Thank you very much for appearing before us. I do not want to inhibit discussion. We are running late and we certainly want a proper examination of your submission, but I would ask that you keep your answers as short as you decently can, while still providing the information that we seek. Could you briefly give us an opening statement?

Mr Kirkham—Certainly. The approach that we took in response to this submission really was not to focus so much on the particular aspect of telemedicine, but to take the far broader view of the definition of telehealth. This really reflects the nature of the organisation of CSC and the business that we are in, in that we are trying to provide far more global solutions as far as Information Technology is concerned to our customer base.

CHAIRMAN—Could you tell us a little about the organisation? Are you Australian owned? Are you a national entity? Do you operate just in Victoria or have you tendered for work in South Australia?

Mr Kirkham—CSC Health Care Systems is a global entity and it is a division of the CSC Corporation which is based in California. The corporation itself is a \$4.5 billion a year entity. CSC Health Care Systems worldwide has revenues of around \$485 million a year. CSC in Australia operates nationally and has revenues of about \$85 million a year. We currently provide information systems to approximately 80 per cent of public hospital beds and information systems to about 40 per cent of the private sector.

CHAIRMAN—We have already visited South Australia and we saw the renal project at the Queen Elizabeth Hospital there. Was the technology that was used by your company there developed here or was it imported from overseas?

Mr Kirkham—Our focus really has been on the provision of patient administration systems. About three years ago the organisation recognised that one sector of health that was not being adequately met was that of clinical information systems.

Typically these systems are very expensive to build. What we did was to pursue what we call a best of breed policy. That means that we go out and we look for the best information systems solution to address that particular niche.

CHAIRMAN—Was that drawn up for the particular need of the clinicians in the

Oacis project or did you use a system that was already constructed?

Mr Kirkham—A system that was already constructed. It was sourced out of the Oacis Corporation which is based in California in the United States. One thing I have to emphasise about Oacis is that it is not a turnkey applications solution. It is actually a tool kit which information systems can be built with. The system that has been installed and is now running live into hospitals in South Australia is a system that was built to meet the specific requirements of the renal project. However, when I say that, the Info 2000 model which the South Australian Health Commission is pursuing does involve rolling that system out not only into other departments in those four teaching hospitals but also to support multiple care providers in other sectors such as primary care.

CHAIRMAN—Could you tell us briefly any other projects in which you are involved? Are they pilot projects or are they something that has gone beyond the pilot project stage into a situation where they are being permanently implemented as part of the health care system?

Mr Kirkham—The other major initiative that the organisation has taken is what we call the Health Care 2000 Project which is also based in Adelaide. This is a cooperative development with the South Australian Health Commission. It is focusing principally on the provision of application systems to support resource management in a clinical area and to support clinical care in terms of best practice protocols, care profiles, care templates and assessments.

The first two modules of that system went live on the beta site, which is the women and children's hospital in Adelaide. Care templates went live in January and care profiles went live on 20 March. The assessments module is due to go live at the beginning of June this year.

CHAIRMAN—Are the technological health care systems that are being introduced around the world basically compatible or is there a lack of agreed and approved standards?

Mr Kirkham—Standards are always going to be an issue. I think it is probably fair to say that perhaps five to 10 years ago one would have seen that. I know there have been some disasters here in Australia where organisations have attempted to implement systems that have been sourced from particularly the United States. With health reforms in this part of the world and within the United States you are seeing a more common model develop for health service delivery. This means that systems such as Oacis, for example, which are sourced overseas and are supposedly in a different health care market do have a much higher degree of compatibility to the Australian environment today.

We also source other product from the United States. That product has been very successfully and widely implemented here in Australia as well.

CHAIRMAN—The committee understands that costings relevant to projects have been undertaken but that an appropriate model to determine the overall costs and benefits to any health system, whether in Australia or any other country, has not yet been found. Do you have a model or can you tell us about a model for overall costing and bring some light into an area where up until now there has been a great deal of darkness?

Mr Kirkham—Costing for health care delivery?

CHAIRMAN—Yes.

Mr Kirkham—The product that I just mentioned is a decision support product which was also sourced out of the United States from an organisation called the HBO Corporation. That is a decision support clinical costing tool. We have state-wide contracts in New South Wales, South Australia, Western Australia for that product. We do not have too many installations here in Victoria but I would say that it is—there are probably two products in the marketplace that do clinical costing. One is Transition and ours is Trendstar. The Trendstar product is probably the most widely implemented in Australia. With it, you can cost things right down to the actual procedure—down to the cost of a laboratory test. It takes into account all costs, including overheads, so all costs components are there. It can then be built up so that you can build a cost for a DRG or for an episode of care. This is widely used; a lot of the initiative for a lot of hospitals to take on a system like this is the DRG basis of funding which is the model which is followed here in Victoria.

Mr QUICK—You are a pretty big organisation, internationally as well as nationally. Within your templates have you done any smart card technology within the groups that take on your services? For example, within the three or four hospitals in Adelaide you could come to an arrangement with the clients. You could use the hospitals to say, ‘Look, 10 or 20 years down the track this is what is going to happen. It is happening in banking with the mondex cards where they put 14 A4 pages of information on a very small chip.’ It will come to health. Have you got involved in anything like that in, say, pathology? With all the information on one card, as one of the doctors said here, they could swipe the card when they go into the Queen Victoria or Prince Henry’s or wherever. Have you developed any of that?

Mr Kirkham—We have not developed any of that. I guess most of the work that has been done with health care with smart cards is more in Europe than it is in the United States. We have only really done exploratory stuff here in Australia in terms of looking to see whether there is potentially an opportunity. In some ways South Australia probably would not be the appropriate state, given their strategy for Info 2000, which is rolling out Oacis to cover all sectors of health care and actually building a clinical database repository—an electronic medical record which will support the continuum of care. By having a system like that that you would have multiple access points, given adequate security, to get to the specific information on any patient.

Mr QUICK—But are we reverting back to England just after the development of the steam train where we had lots of businesses setting up throughout England and it was replicated here in Australia with six different state railways. What if Western Australia says they will have a different system because the one in South Australia does not work for them, and Tasmania says, ‘We have only got 460,000 so perhaps we ought to link in sensibly with Victoria.’ We would not have a national system. Why not issue a smart card to every Australian with all the information there—the technology is already present—rather than South Australia doing their own little thing? What are the other states going to do?

Mr Kirkham—The delivery of health care in this country in particular has been very state focused. An issue that is raised, for example, down to the state level and even below the state level is that virtually every institution runs their own unique identification system for patients. Hospitals here in Victoria with the formation of networks are now having to face the fact that where they have got mobility of patients across member institutions within a network, they have different identifiers, which means there is not an easy transportability of information from institution to institution. That really supports the argument that you are making. The major benefit from a smart card is that it means that the patient carries their information around with them. There is portability of information which does not come through your traditional information system.

When I said we were at the exploratory stage with smart cards, these are the very questions that we are asking as well in terms of the marketplace and what is the need out there for such technology.

Mr QUICK—Okay. The people in Broken Hill are New South Wales residents but a lot of them have access to the South Australia system.

Mr Kirkham—That is true.

Mr QUICK—Does the Oacis system in South Australia cover people in Broken Hill?

Mr Kirkham—Oacis is going to, under the umbrella of the renal departments because they provide support through to the Northern Territory. So Oacis is going to be implemented right through to the Northern Territory. There is no reason, for example, why a system such as Oacis, with that powerful clinical database repository, cannot support a much wider geographic area. If you take into account equivalent populations in the United States where you have very large HMOs or health maintenance organisations, those organisations are using a tool such as Oacis and using it to support quite large populations. That population is within a relatively constrained geographic area. I think the argument that you are making is about the geographic dispersion.

Mr QUICK—Are you interested in replicating it in other states?

Mr Kirkham—Oacis?

Mr QUICK—Yes.

Mr Kirkham—Certainly we are. We have had discussions in New South Wales, Queensland, Western Australia and also Tasmania. One of the disadvantages with a highly sophisticated system like Oacis is that it is not cheap either to purchase or to implement. I made the point in my paper that organisations which would potentially be purchasing such a system would be acute care institutions. But if that is to be rolled out to a wider geographic area with more care providers, then one has to ask, ‘What is the most equitable way to fund such an investment?’ given that the users of that system are going to be much wider than those in an acute care institution.

Mr QUICK—But wouldn’t it be silly if, for example, Westpac banks in every state in Australia suddenly decided to have different communications systems? That is virtually what is happening with health, isn’t it? We have got each state saying, ‘We are into the Information Technology era. Let’s all go and reinvent the wheel.’

Mr Kirkham—I could not agree more, but you really have to look at where the business drivers are coming from. Westpac sees itself as an international organisation, therefore things such as states do not mean as much to them. What we are responding to here—and I admit quite openly that we do take a state based approach—is that the service delivery models are governed by the governments in each state. That is why we are taking a state based approach.

Mr QUICK—But should they be? You talk about a cost-benefit analysis—

Mr Kirkham—I agree entirely—it should be a national approach.

CHAIRMAN—I suspect it is beyond Mr Kirkham’s control.

Mr Kirkham—Thank you!

Mr QUICK—A lot of the state instrumentalities are exporting their expertise to Malaysia, and goodness knows where else. Yet we cannot get a coherent system operating within Australia for Australian nationals. A previous witness talked about the community service obligation—that all Australians, irrespective of where they live, should have access to this. But no-one is assuming the responsibility. South Australians say, ‘We are fine. We have got this wonderful system. We do not give a toss about anybody who lives beyond an arbitrarily drawn line either side of us.’

Mr Kirkham—That is not actually the view that South Australia takes. That system and the implementation has created an enormous amount of interest, even from New Zealand, for example, and supporting the renal unit in Christchurch hospital from

that system running in South Australia has been discussed. So South Australia's vision is certainly much wider than state borders. It comes back to the argument that I made earlier about where the business drivers are coming from. There certainly does need to be a federal approach here.

New Zealand does have a rather unique advantage in that, even though the population is quite small, there is a unique national identifier for every individual in that country. You run into problems in a country the size of Australia because of the sheer size of the population, but I do not think that sort of thing is insurmountable at all.

Mr QUICK—What other countries have national identifiers, apart from New Zealand?

Mr Kirkham—New Zealand is the only one that I am aware of. I was at the Health Information Management Systems Society meeting in San Diego in February. That is probably the largest such conference in the world—there were about 16,000 people registered for it. From a number of the papers, the organisations largely driven by managed care were suffering the same sorts of problems because there was not a unique identifier. The state of California has been trying for something like seven years to implement a state-wide identifier.

Negotiations and deliberations are now occurring at a federal level in the US to implement a unique identifier for patients and there is talk about using the social security number. Technologically it can be done; there is no question about that. It is a question of whether the will is there to make something like that happen. The same principles apply in Australia.

Mr QUICK—We all have an identifier now—our tax file number—so big deal.

Mr Kirkham—Yes, I agree.

CHAIRMAN—That is something we could look at and I imagine Mr Quick will draw it to our attention when we are deliberating on our report.

Mr Kirkham—You have to look at the arguments for doing such a thing. On the converse side are the issues about security, privacy, ethics and those sorts of things.

Mr QUICK—I suppose we cannot get a national driver's licence yet. We are still walking up the steps, if you like. We have a national rail gauge and we now have national road rules for transport, buses and those sorts of things. It is usually as a result of some huge catastrophe, such as when people suddenly think we had better put seat belts in buses because we are losing 50 or 60 people at a time. But it is not the way for health.

Mr Kirkham—Sure. The main driver for having a unique identifier is that with a

unique identifier you can build a true continuum of care record which covers multiple episodes. What that means, as far as the patient is concerned, is that there are far better outcomes from a health perspective, given the fact that every episode that has occurred for that patient is on file and accessible to those people who have access to it. That is the main reason for doing something like that. It is an issue of quality of care.

Mr QUICK—Who is driving all of this modern technology? Is it your company saying, ‘This is the way to go. We expect to draw all the states along behind us because we can do a wonderful presentation to influence the South Australian Health Minister and Premier so that they say it is good for South Australia’? Does any of the drive come from them? In Victoria they have a link with Malaysia. I think the Malaysian Prime Minister said, ‘What do we need to do? Let’s go and do it. You are all compelled,’ because it is a one-party state, ‘and this is what you are going to do.’ So it is all solved within three or four months.

Mr Kirkham—It is a combination of factors. In our organisation we identify, from the purely commercial point of view, market opportunities which might exist. We test that market in terms of the appropriateness of a particular solution. By the same token, quite often the initiatives come from organisations, such as the South Australian Health Commission who want to pursue the initiative which is their Info 2000 model and which they are currently pursuing.

It is not really a question of us doing very good presentations and persuading them. We like to think we, as an organisation, can stand the risk associated with a leading edge implementation such as is occurring in South Australia. We give those guarantees and the system does, as has been proven, actually work.

Mr ALLAN MORRIS—The intellectual property rights owned by CSC and—

Mr Kirkham—The intellectual property rights are an issue for debate at this time. We would like to see the intellectual property rights from a system as has been installed in South Australia being in the public domain. A lot of the functionality that has been built into that system is quite unique. I think the South Australian Health Commission is looking for that to become part of the public domain as well. Whilst we have been involved with the implementation and the installation of that system, we do not believe that that entitles us necessarily to intellectual rights.

Mr ALLAN MORRIS—Except that you are using some of your own proprietary software from the United States. You are adding to that software developed by the various states of Australia. You are then looking at the export market. It would seem to me that that is not necessarily in Australia’s interests.

Mr Kirkham—In terms of our own interests, where our revenue comes from is the licence fees for the software for the product and the database, and also from the

implementation services. That would be an issue that the South Australian Health Commission would have to address in terms of Australia's best interests.

Mr ALLAN MORRIS—That was just one example. I was not only talking about South Australia; I was talking about your other projects in Australia and New Zealand. It would seem to me that what they are doing is value adding to your proprietary product, which you are on-selling into other countries. That does not seem to be of benefit to Australia. It seems to me that we are simply helping your company to get a better product to sell somewhere else.

Mr Kirkham—With Oacis in particular that is the point at issue, that we are discussing those intellectual property rights. It may very well be that our organisation says to South Australia, 'If you wish to provide those services outside of South Australia, and even internationally, you can accrue the revenue from doing that.'

Mr ALLAN MORRIS—But it seems to me, going back and looking at your comment about international sales in the Asian market and so on, that you are using Australia as a base for your marketing into Asia. There are also Australian companies developing software which are in competition with you—

Mr Kirkham—Yes.

Mr ALLAN MORRIS—But they would probably be owned in Australia, not in America as your company is.

Mr Kirkham—No. We are a fully owned, Australian owned subsidiary of CSC Corporation in the United States.

Mr ALLAN MORRIS—That means your parents own your property?

Mr Kirkham—Yes, they do.

Mr ALLAN MORRIS—So in our national interest it would be much wiser to lend encouragement and support to intellectual property being developed in Australia by Australians, which actually stays owned in Australia. Whilst you are using Australians, the ownership is not theirs.

Mr Kirkham—We are Australians. We do not employ any Americans here.

Mr ALLAN MORRIS—Yes, but the Americans own the property that you develop.

Mr Kirkham—No—

Mr ALLAN MORRIS—The results of the endeavours of some of our best and brightest brains—

Mr Kirkham—No, the property is owned by Oacis Corporation, not CSC Corporation. We simply market, distribute and implement the product here in Australia.

Mr ALLAN MORRIS—That is not clear in your submission. In fact, it is pretty obvious that the MDIS stuff is all owned by CSC—

Mr Kirkham—Sure.

Mr ALLAN MORRIS—By the way, Mr Chairman, I should point out that CSC used to be CSA, Computer Sciences of Australia.

Mr Kirkham—That is right.

Mr ALLAN MORRIS—They were taken over by CSC America. There is a real problem there because they also own an awful lot of defence technology software. I think there is a real quandary about that as well. I have got a real problem with much of your staff, simply because we are trying to encourage Australians to develop products to sell into Asia as well as to be used in Australia, but for which the proprietary rights stay in Australia and do not go overseas. I guess I have got some quandary about that.

Mr Kirkham—Yes, I can see where you are coming from.

Mr QUICK—Mr Chairman, could I come in there? I know there are other people who have been sitting there for ages. In your appendices there are some things—for example, about Georgia and West Virginia—of which we have got a pretty basic one- or two-page description. Do you have any more meaningful documents about such things? I am really interested in the West Virginia mountaineer doctor television network and also the Georgia state-wide academic medical systems, and how Southern Bell got together with various networks to perhaps produce a better cost outcome for things.

Mr Kirkham—I can certainly provide you with more detailed information on that, but I need to qualify that with the statement that I made in the submission, that CSC Australia has not been involved in any pilot telemedicine—which I prefer to call interactive video projects here in Australia at this point in time—

CHAIRMAN—Another definition.

Mr Kirkham—My definition of telemedicine is slightly wider than most people's. The organisation that we represented here, which was CLI—Compression Labs—has since been taken over by another organisation called V-Tel. So we do have an association with V-Tel, which has been much more active than the Australian and New Zealand

marketplace than CLI was. But once again this is an example of what we call our best of breed approach: we obviously do not have the resources in this part of the world to actually develop telemedicine applications, which is why we form alliances with organisations such as V-Tel.

Mr QUICK—Could we have some more information about this 24-hour a day toll free telephone information service that has been developed in West Virginia?

Mr Kirkham—Certainly.

CHAIRMAN—If you would pass it on to the secretary, that would be appreciated.

Mr Kirkham—Yes.

CHAIRMAN—Thank you, Mr Kirkham, for appearing before us this afternoon.

Mr Kirkham—It has been a pleasure. Thank you.

CHAIRMAN—We greatly appreciate your contribution. We were most impressed with the submission itself.

[4.19 p.m.]

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

WATTS, Dr John Cameron, Director of Medical Services, Warburton Hospital, PO Box 300, Warburton, Victoria 3799

CHAIRMAN—Welcome, Doctor. Thank you very much for appearing before us this afternoon. Do you have any comments to make on the capacity in which you appear?

Dr Watts—I am also in part-time general practice.

CHAIRMAN—Thank you for that. I will ask you in a moment to make a very brief opening statement. When you do so, could you tell us where Warburton is?

Dr Watts—Warburton is approximately—

Mr ALLAN MORRIS—Have you moved?

Dr Watts—No, not recently.

CHAIRMAN—Is it in Mr Forrest's electorate, like everything else in Victoria?

Dr Watts—No, the other way, in fact. We are about 75 kilometres east from Melbourne, in the upper Yarra Valley at the foot of Mount Donna Buang.

CHAIRMAN—Would you like to give us a brief opening statement?

Dr Watts—The reason for the submission is to raise the issue of teleradiography in rural practice. As both an administrator-provider of an X-ray service and also as a general practitioner user of that same service, I find that the need for more instant reporting is an issue that comes up from time to time. That is why the hospital, approximately 12 months ago, took a look at a system. We even had our radiologist supplier on side to the point where they would provide their end of the technology and we had to provide our own. However, our budget could not really afford it. Nonetheless we had a chance to look at some of the issues.

CHAIRMAN—So what do you want the government to do to facilitate what you want to achieve?

Dr Watts—The end of the line would be, as I think I heard earlier, a Medicare rebate if that is possible. I appreciate that this is not a budget committee but, from our calculations, approximately a \$10 per use rebate would come somewhere close to

providing a cost neutral service.

CHAIRMAN—Being a public hospital you are not involved in the Medicare rebate system anyway, are you?

Dr Watts—We are a private hospital. We have, I think, quite a good level of technology there for the needs of the local community; however, it is certainly not cost neutral. It costs the institution perhaps about a \$120,000-odd deficit to actually provide that service, without—

CHAIRMAN—We have had evidence from private radiology providers that they use teleradiology within their own practice, particularly where they have a number of branches, but they do that for their own convenience. There is, as you say, no Medicare rebate available for that service. If we are going to encourage telemedicine, I would hope that we make some kind of recommendation to encourage people financially to use the system. What teleradiology projects have you been involved with, as a hospital?

Dr Watts—We have not actually been involved with a project. I think it is more a case of seeing the request for submissions and pointing out the need of rural Australia. If you are talking specifically about projects, I guess it is just taking a look at the figures. I have detailed some fairly rough calculations there. As I say, that was approximately 12 months ago, and I would hope that with time these figures would come down. That is a very rough guide to the sorts of costs that we were looking at having to include in the budget. As a round figure, we saw an increase of approximately \$30,000 to our budget, which we could not see through to fund so we have not gone ahead.

Mr QUICK—You state on the last page that the cost for a teleradiology system varies from \$120,000 to \$250,000.

Dr Watts—There are different suppliers, with different levels of quality, and price—

Mr QUICK—So the ideal one for Warburton would be—

Dr Watts—In fact, at the lower end, around the \$120,000 to \$150,000 mark we found quite adequate. Most of the weight fell back onto two companies. Between the pair of them I think we could have got a figure close to the \$150,000, yes.

Mr QUICK—So how many similar sized private hospitals in Victoria are in the same sort of category of saying, ‘Will we or won’t we?’ Are you aware of that?

Dr Watts—Again that is something which I am not aware of, but certainly, to my knowledge from the private hospital, there would be approximately four larger private hospitals in the rural setting which would have a reasonable quality of X-ray service that

may look for this sort of thing in the future.

Mr QUICK—So where would you link in to?

Dr Watts—We would link with our present private radiology suppliers, which is the Knox group. They are based at Lilydale and Boronia. As I say, they presently would fund their half of the system, because they could see it being convenient to themselves. But we would have to fund our half and then the running costs and maintenance, which is an issue.

Mr QUICK—So you are looking at about \$200,000?

Dr Watts—Like I say, our end would probably only be around the \$70,000 to \$100,000 setup. But then you would have the annual running costs of approximately \$35,000 to provide the sort of service we are looking for in regard to after hours reporting.

Mr QUICK—What size of client base do you deal with?

Dr Watts—We have a 4,000 procedure base at present. To give you some idea, the specialists are there only for two half-day sessions per week; plus we cover all after-hours emergencies in the area. Well over four-fifths of the work is done outside of a specialist attending, and so you can imagine the figures involved.

Mr QUICK—With 4,000 people, how many would need Teleradiology in a given year?

Dr Watts—I would think probably for half of those it would be of significant benefit. Perhaps half are fairly routine procedures, and the other half would be more urgent and the patient would therefore be anxious to get an urgent report.

Mr QUICK—Assuming that half the patients use it, that works out at about \$16 per person per year, with \$32,000 per year in running costs and 2,000 people.

Dr Watts—That would be approximately right.

Mr QUICK—John is more remotely situated than I am, but I have got remote areas in Tasmania that are remote even by Tasmanian standards, and we have trouble getting GPs down there. What are the incentives for hospitals? You are considered to be a little more remote, although not as remote as Manangatang.

Dr Watts—They are a lot worse off than we are, but it is still—

Mr QUICK—What sort of incentives should there be, as part of this community

service obligation for people living up at Warburton? With Australia Post, it costs 45c to mail a letter there and it is 45c in town; so what sort of levelling incentives or bonuses can we give those people to ensure that there is the same access to radiology that people in Melbourne take for granted, in the same way that Australia Post works? Someone said that the previous doctor from Manangatang earned an additional \$5.

Dr Watts—We could probably get a budget somewhere around the \$10 mark. As you pointed out, \$16 is probably what the cost is.

Mr ALLAN MORRIS—Why do you want a dedicated line?

Dr Watts—A dedicated line is needed for the speed of transmission. Again, this ISDN—

Mr ALLAN MORRIS—A normal ISDN line? You are only doing 10 per week.

Dr Watts—That was probably to do with the fact that, at present, the hospital would be on the old lines, and adding this technology would certainly mean bringing that in. Yes, it could be used for other purposes but, at present—

Mr ALLAN MORRIS—It seems to me that a dedicated line for that low volume is not all that—

Dr Watts—To have a system functional, you would need this ISDN technology. I am not a technocrat in that sense, but the line could be used for other purposes when not used for that; but, at present, the hospital is not on that technology.

Mr ALLAN MORRIS—But you would be putting up \$12,000 per month for line leasing, which I would have thought—

Dr Watts—No, that would be installation, not lease. The \$12,000 would be a one-up cost, I am told, to introduce that. I am told that that has actually come down since this was written.

Mr ALLAN MORRIS—I presume that you will scan the X-rays: is that the idea?

Dr Watts—Yes, that is right. It is like a high technology fax, in essence.

Mr ALLAN MORRIS—You are not using a digitising X-ray; you are actually sending a scan?

Dr Watts—It will be scanned, digitalised and then sent through.

Mr ALLAN MORRIS—The digitising is not part of the X-ray machine?

Dr Watts—It is not part of the initial X-ray film, no.

Mr ALLAN MORRIS—So you are talking about the scanning costing that much, are you? What is the \$120,000 for?

Dr Watts—The \$120,000 buys you a computer at each end, a high definition screen for the receiver, a high definition scanner at the sending end and the software to run that.

Mr FORREST—But you can get those items of equipment for \$5,000 or \$6,000, tops: it takes a lot of those to add up to \$120,000.

Dr Watts—The memory involved in these computers is something quite significant for scanning X-ray films, and likewise the scanners are at the expensive end of it all. A good quality scanner is in the \$50,000 range.

Mr FORREST—A scanner would be expensive; that would probably be \$50,000 or so.

Dr Watts—That is right, if it is to be of any use in terms of a primary diagnoses without wanting to keep referring to the original film; and, likewise, the television at the other end.

Mr ALLAN MORRIS—I still question it. For the volume you are talking about, though, if you are looking at a high speed activity, you would want a lot of memory, a lot of disk space and a really good scanner for speed. But scanners are a combination of size and speed; so, if it scans slowly, it costs less than when it scans quickly. I would be surprised if you could not get it for a lot less than that, actually, in terms of the volume you are after.

Dr Watts—It is possible that they just plain do not make a machine that is running for occasional use. That may be the case. Certainly, at the other end, the radiologist will be busy and will want a turnover; and possibly, at the hospital end, that may not be the case.

Mr ALLAN MORRIS—Even then, if they are receiving it, that is the easy part: when it is ready to be looked at, they look at it, and they do not have to worry about waiting—

Dr Watts—That is right, once it has arrived.

Mr ALLAN MORRIS—They can do some other job: it does not tie them up for

anything.

Dr Watts—As I say, to my knowledge there is not really that half-way technology that you are talking about.

Mr ALLAN MORRIS—Mr Chairman, the problem we have here—and you would have noticed this yesterday, too—is that we are really confronting a question of people saying, ‘We’ve all got motor cars, but there are no roads to drive on.’ We have had now two examples of where essential infrastructure items should be part of the normal medical hospital landscape. They should not be funded separately as special deals, because they should be a normal part of the equipment. It is like putting in gas pipelines in a hospital, rather than using cylinders. Years ago we used to always use cylinders. Now, other things are fitted as part of the architecture. This should be part of the architecture. These kind of things should just be part of the normal system, not something separate and special.

The fact is that we are in danger of keeping them separate. There is a real danger that we will keep them as Orphan Annies and recommend that this kind of thing be done here or there. What that essentially means is that the hospital infrastructure system will not upgrade itself as it should have done five years ago, at least. This stuff has been around for a long while. It should have been fitted to country hospitals and country areas, way back. I am concerned that we will be recommending for Dr Webb, firstly, that they should invest in that infrastructure for bush nurses and so on.

Mr FORREST—I will second that.

Mr ALLAN MORRIS—We do not ask this for cars: the car is already there. The architecture you are looking at is part of the infrastructure. What Dr Watts is asking for should essentially be part of normal infrastructure for an awful lot of these services in outlining areas. I am little concerned that we may end up holding it all up, in effect, by treating it as a something special. It is like tarring a road: you put some bitumen on a road that should have been done years ago—

CHAIRMAN—I get the point, Mr Morris.

Mr ALLAN MORRIS—I am urging Dr Watts to see it, as well. It is like having a gravel road which should be bituminised. Getting it done as a special deal means that, when the potholes come, who is going to fix them? It should be part of the normal architecture infrastructure that is available to these areas, and not be some special deal.

CHAIRMAN—Are there any other questions of the witness?

Mr QUICK—Assume that a white knight said, ‘Here is \$200,000; you can put the stuff in.’ That is Teleradiology dealt with. What is next for Warburton Hospital in the way of Information Technology improvements?

Dr Watts—I confess that this is the only interest that we have at present. With time, no doubt, there will be teleconferencing on clinical matters, but that is outside my expertise at present.

Mr QUICK—We know that, as part of the Victorian grand scheme of Information Technology, Goulburn Valley Hospital is linked in with St Vincent's and all the other ones. Is there any hope that Warburton Hospital might also be, if they say, 'Who else would like to put their hand up?'

Dr Watts—I hope so. At present, the nearest government hospital would be Maroondah, which would take roughly an hour to get to from Warburton for anything after hours, if you did not want to go to Warburton. It would be ideal to be linked in, after hours, even if it were just at this initial phase of teleradiography, which is something that is up and running, in order to be able to review films with the clinical staff there and so on. That would be quite exciting from, I guess, the emergency after hours situation, where perhaps you need some extra help with how to deal with somebody.

Mr QUICK—Because you are a private hospital, you are not involved, I guess, with the state health system.

Dr Watts—No. The ambulance obviously brings any case to us which they feel needs to be assessed medically first, before it is referred on. That may or may not mean that the hospital is refunded for that service. That is as far as we go at present; and we do talk to a further referral centre if necessary. So, yes: with time, I would like to think that perhaps we can link in. Certainly, I do not see our specialist colleagues being available after hours just to have a look at a film, which would have happened during work hours. We are still going to need some specialist colleagues available after hours to review our films; and that would presumably be at somewhere local like Maroondah, which is the closest place.

CHAIRMAN—As there are no further questions, Dr Watts, thank you very much for appearing before us. If, on reflection, you feel you would like to make any additional points, particularly given the comments of Mr Morris, please feel free to drop us a line and we will be more than happy to circulate your material. We are very keen to make a positive contribution to the advancement of Telemedicine. We are getting lots of advice—and, in many cases, differing advice—from different people, so anything that you can assist us with would be greatly appreciated.

Dr Watts—I would like to make a brief comment. Perhaps half of the total number of procedures that Medicare report as coming from our area are being done outside our area. The cost of that to the community in terms of travel alone versus Teleradiology is significant. Again, perhaps there could be a direct link for those things.

CHAIRMAN—Thank you.

[4.37 p.m.]

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

FERGUSON, Dr Robert John, C/- 4-6 McDonald Street, Mordialloc, Victoria 3915

CHAIRMAN—Welcome, Dr Ferguson. In what capacity do you appear before the committee this afternoon?

Dr Ferguson—I am a full-time general practitioner in Mordialloc, which is a south-eastern suburb of Melbourne. I speak as a private GP with a particular interest in computers and their use in clinical practice.

CHAIRMAN—Would you like to make a brief opening statement, perhaps to highlight aspects of what you have already told us?

Dr Ferguson—I would like to thank you, firstly, for the opportunity to speak today. As I said before, I am a full-time GP. I am not an expert in computers, so try not to stump me too much! It would have been nice to have been able to give you a practical demonstration of what I do in the surgery, but I believe that that would make it too difficult to record. We are at a very important stage in information management and technology in Australia, and there needs to be a lot of initiative taken at a federal and state level, as well as a lot of money spent in order to save moneys.

For GPs and other medical practitioners in their daily clinical work, technology and software are available which can dramatically improve the standard of medical care given to their patients. Raising the standard and quality of care that we can give our patients will, in the long run, save the system money, thereby justifying the initial expense. I am sure that you have had pointed out to you what a lot of clinical systems in use today can do in a general practice and medical practice setting. I will just quickly go through them for you.

With the programs that I myself use, we can improve the drug management interactions and compliance with patients. We can improve the immunisation rates of all our patients. We can decrease the number of tests being ordered. We can improve on the amount of population morbidity and illness data that we have—data which is sorely lacking in the community at the moment and which will help to plan health services in the future. We can assist in the medical decision making process, and we can improve the level of education of our patients and also foster their involvement in the management of their illnesses.

The information transfer between the different players in the health field is very important. It is a very haphazard system at the moment, as I am sure you are aware. We

can also help general practitioners, particularly those in rural areas, to improve their CME levels: their medical education and communication skills. Overall, the advantages are going to be to three different parties: the patients, the government and the medical practitioner.

There are a lot of barriers going up to prevent GPs, in particular, from computerising. I outlined them in my submission. There are concerns about the confidentiality and security of the information, and the inadequacy of the hardware and software that have been around. There is the perception that computerisation interferes with the actual consultation process with our patients, and there has been a lack of independent advice available to GPs and medical practitioners on what hardware and software they can have.

There has also been a lack of coordination of activities between different hospitals, between regions, between states and at the federal level, as well as with all the other health care bureaucracies and organisations such as the College of GPs that are involved.

Of course, another barrier is the cost and the multitude of things that are going on in general practice. The cost to the general practitioner is not just solely the hardware and the software, it is the actual training time that is required. It is the loading time of the data. It is the interaction that occurs during the actual consultation. Even though you would perceive computers to speed things up, they do not necessarily do it, they provide you with a better quality of care.

I get on my bandwagon every now and then and tell my colleagues they should be computerising, but for many of them it is the perceived technophobia that they have, they just cannot manage computers. I think that is an important thing where we need to make sure that they are educated, they have the training, and they have the support at the local level from colleagues from other sources such as the divisions of general practice that are in existence.

There are a number of things that need to be done to help up-take the computers in general practice and medical practice overall. As you have no doubt heard, there needs to be some consistent national guidelines for various coding of diseases, for information transfer, for pathology results and things like that. Unfortunately, that has not happened to this stage. There has been a lot of discussion, and it is not just restricted to Australia. There is talk about the difficulties with the coding of illnesses and diseases, it is a worldwide problem.

There needs to be a great deal of cooperation between the different parties. When I came in before you were alluding to the fact that there are states versus the federal government and who should hold responsibility for things. I think it really needs to be a national step that needs to be taken to not so much—

CHAIRMAN—When you say steps need to be taken, what role do you see for government, state and federal?

Dr Ferguson—In this area in particular of disease coding, there has to be an expert body that needs to be brought together to decide on a set of principles for information.

CHAIRMAN—And generally, in relation to telemedicine?

Dr Ferguson—I am speaking as far as electronic prescribing and clinical records are concerned. Telemedicine is probably not as relevant to me as an urban general practitioner.

CHAIRMAN—I think you are doing a form of telemedicine.

Dr Ferguson—You are using electronic and using computers as part of your procedure. You are not actually using a television screen as such, no, but you are using the technology, the software, that can still be used in other ways.

There needs to be, as I said before, some dedicated local support for the general practitioners for their use of clinical computers such as divisional Information Technology officers to give them advice and support on problems that will occur day to day and how to set the system up and things like that.

One of the things that has been skirted around is the costs to the GPs in terms of actual dollars for the computer system. Given that the community and the patients are the ones who are going to ultimately benefit from improved health care from the use of computers, I feel it is the role of the government at whichever level—state or federal level—to become involved in the funding of computers for clinical applications.

CHAIRMAN—Are you serious?

Dr Ferguson—Yes.

CHAIRMAN—What about other professions?

Mr QUICK—The Tasmanian Premier said he would provide all schools with the Internet and all teachers with a lap-top.

CHAIRMAN—We are talking about government schools there.

Dr Ferguson—I can see your point, you are talking about private medical practitioners, but private practitioners are providing health to the general community—

CHAIRMAN—Yes, but for a fee. I am not opposed to profit, it is not a dirty word, but it just seems to me that medical practitioners have been coming before this committee and basically asking for a special deal to computerise medical practices that is not available to other professionals in their practices. Engineers don't get it. I am wondering why should an exception be made, or are you suggesting that the government should be similarly generous to other professions?

Dr Ferguson—No, I am suggesting that the profit margins in general practice are not at a stage where people can dedicate tens of thousands of dollars per doctor on an ongoing basis to be able to implement computers unless there is a change in the way general practice or medical practice is funded in Australia. Because the community in the long run is the beneficiary through improved health outcomes and through health budget savings, I think it should be the responsibility of the community to assist in the funding of the computers.

CHAIRMAN—How?

Dr Ferguson—I think there are a number of ways that it can be done. There can be assistance with lease agreements and arrangements or preferred dealers can be organised. There can be improved depreciation or improved writing off of the costs of the computers. There can be help with the training of the GPs and providing the support, as I said before, through the divisions of general practice. There are a number of ways that it can be done. I agree, it is not an insignificant cost but, if you consider that the IBM report initially stated that about \$300 million a year could be saved by using electronic prescribing, it is not an inconsiderable amount of money. It is an ongoing amount of money that can be put back into improving people's health outcomes.

CHAIRMAN—One other thing we could do is allow doctors who do not bulk-bill to bulk-bill the Medicare rebate proportion of their bill to the Health Insurance Commission. That would cost less to administer. If you use a computer, you could perhaps get paid within two days instead of 14.

Dr Ferguson—Or whatever.

CHAIRMAN—We have heard that it is a minimum of 14; is it not?

Dr Ferguson—A minimum of about four weeks but it is supposed to be 14 days.

CHAIRMAN—If doctors got back the Medicare rebate more quickly, it would be another encouragement for doctors to pay money out of their pocket, would it not?

Dr Ferguson—If it was a quicker thing. That is only a temporary spurt of money that comes in. It is a temporary improved cash flow. It is not a long-term increase in the overall income to a practice though. I can see your point that the public funds would find

it difficult to do such but unfortunately general practice at this stage is tight, speaking as a GP. It has cost me money to come here today and say my piece. We only get paid when we see patients.

CHAIRMAN—Are you a bulk-billing practice?

Dr Ferguson—Only for the elderly, health care card holders and the unemployed.

Mr QUICK—You mentioned improvements in drug management, immunisation, population morbidity and the medical decision making process as a result of computerisation. Can you focus on the immunisation: I think we are worse than most of the Third World countries.

Dr Ferguson—I am not sure where the 53 per cent figure came from but if we—

Mr QUICK—Tens of millions of dollars are being poured into Australia annually for immunisation and we never seem to get any better. Perhaps some of that money could be redirected, as you say, to the provision of adequate computerisation so that population morbidity, immunisation, drug management, all of those things, could be improved. Preventative medicine, with a cost flowing down to society—

Dr Ferguson—In the long run.

Mr QUICK—The amount of money we are handing out is infinitesimal compared to the results of poor drug management and lack of immunisation.

Dr Ferguson—As I said, with the IBM report, they did quote \$300 million a year as an ongoing cost for just hospital admissions due to morbidity from medication mismanagement by doctor and/or patient. The computer can give a record of, say, drug interactions and compliance. The record would state that this patient has been in last week and has come back for the same thing or it has been six months since they have had the last prescription when they should have been back within three months. Knowing this can improve the GP's knowledge of where the patient is at with their medications. Obviously it can check on the reactions and the problems that can occur. It is also a double check of the doctor, and none of us is completely infallible as far as interactions go.

As far as immunisations, most of the computer programs in clinical use have registers for immunisations and it is well recognised that opportunistic immunisation of patients by their GP is one of the best methods of catching up with the immunisations. If, as in the program I use, it comes up with a prompt every time you see a child under the age of 13 to remind you to ask if they have had their full immunisations, that is going to chip away at the 47 per cent who are not fully immunised.

Ms ELLIS—Did you say before that you considered yourself a bit of a computer

expert?

Dr Ferguson—No.

Ms ELLIS—You are not?

Dr Ferguson—No. I just use them. I know my way round the keyboard.

Ms ELLIS—I am sorry, I thought I heard you say that.

Dr Ferguson—I am not an expert and I do not come with any formal computer qualifications or background. It is just what I have picked up.

Ms ELLIS—What prompted you to go so far with it, in comparison with some of your colleagues who are very reluctant?

Dr Ferguson—I could see the benefits it could have for general practice and for the community. It is the morbidity data that we can gather for our patients. It is the preventative information that we can gain and gather for people once we know their full histories. You have preventative screening sections: have you checked their blood pressure? Have you checked their urine? Have you checked their diabetes? That sort of thing. I think the computer can act as a prompt a lot of the time for us to remember important things amongst the other many things that patients come in for every day.

Ms ELLIS—To what degree would you already—without a computer—have received requests from government, or health authorities, or for epidemiological studies, or whatever, for particular data concerning your client base? For argument's sake—I am ignorant of what sort of data collection already goes on—I know that it does in relation to immunisation, but what else is there? Is there anything else, and to what degree does this assist you in doing that?

Dr Ferguson—There are not a lot of formal requests. You will get involved with studies that academic departments of general practice or the local region of the health department will run. Most of the illness figures that are available in Australia are due to census figures or hospital admission figures. There have been a few big general practice surveys, but simply because the data retrieval is so difficult with a paper based record, it is difficult to get everything in the one place and the one time. In an ideal system with a paper record, one should be able to do that, but then it is a matter of electronically collating it and entering the data. And if you are doing it there with the patient at the time—and I can give you a breakdown of most of the diseases that most of my patients have, because I am using the computer system—that will help me say, 'I need to improve my education in this area because I have a lot of these patients.'

I have spoken to a lot of the people in the local region of the health department.

They would love to have a lot of information that we have potentially available in general practice. We can talk about the instance of colds and flu, but if you are talking about more major things, like asthma or hypertension, most of them are population based studies. You are dealing with statistically valid figures, but not big numbers right around Australia. If you did have GPs hooked onto using the computers, you would be able to provide a breakdown of all the diseases in their actual population, and therefore target your own preventative activities in the practice and in the local community.

Being involved with the local division of general practice and wanting to get into health promotion, I would like to know what was the most important thing in our area. You can go on what the hospital says has been admitted. They might have had a lot of necks of femurs that have been broken because people have fallen over, but it may actually be that diabetes is the biggest cause of morbidity in the local area, and that we need to check, monitor and prevent it more.

Mr QUICK—As first time people come into your office, do they automatically go onto the computer and not into a paper record?

Dr Ferguson—I use a thing called Medical Direct which is a prescription based writing system with history, immunisations and antenatal records, but we still keep a parallel paper system because not all of us are actually using the computer in the practice.

Mr QUICK—Do you know of anybody that has got a paperless GP's office?

Dr Ferguson—No, not that I am aware of. I think that the technology, as far as the software goes, is still a fair way off before that will occur ideally. I think that just using the prescription writing modules—and there are several major ones around at the moment—is the first step to getting people computerised, and the one that will have the biggest impact on helping morbidity and outcomes of the population. I do not think that a fully paperless office exists in any sort of profession. It just does not happen. Computers go crash and you have got to have a backup available somewhere.

I would not necessarily, there and then, in front of new patients enter them on the computer if they were going to be ongoing patients of our practice. I would do it after they had left. I would enter their past history that I had already written down with all their medications, so that it is all available when they next come in. We have a nice little printed history of them. I have got some copies of my own personal record that I have sort of dolled up for the occasion, if you like.

Mr QUICK—But should it be the role of a doctor to do that, considering your education?

Dr Ferguson—It should be anyway as part of the written forms, yes.

Mr QUICK—Are there other people who are sort of paramedical who could make better use of your time and put that information on and still have the privacy and confidentiality of that? I know that the women in the medical centre that I go to go through all the files. They know that Harry is coming along, so they will get my record out. They check when was the last time I came in—a snake bite. Can they key it in and save you the valuable time?

Dr Ferguson—There is no reason why the office staff could not do that. I am really doing it on my own time, separately. It probably helps me, even if it is the first visit, to get to know the patient better. When it is a pre-existing patient that has been in the practice it helps me bring myself up to speed on what has happened. Often, even in a small practice, people will change from doctor to doctor and you do not have the continuity. Whereas, if you are updating records through transferring them from paper to a computer that does give you an added chance, for example, to say that you did not realise that their tetanus immunisation was out of date, or that they had a family history of breast cancer and they needed to have this checked out. So the computerisation is an added prompt. Once it is computerised, the computer takes over a lot of the prompting for you as long as the system is set up properly.

Mr QUICK—When we get to a smart card technology and when Mrs Evans walks in and says, ‘G’day, Dr Ferguson, I have got something wrong with my leg today,’ you could just swipe the card and up it comes: thrombosis, or whatever it is.

Dr Ferguson—That would be fantastic. I still think it is a fair way off, in reality, because there are going to be a lot of concerns about confidentiality and privacy. We went through the Australia card episode a few years ago. I think the benefits in the long run are going to outweigh the perceived disadvantages of such technology.

Mr QUICK—Every time I take my Westpac card into the Westpac bank, the teller waves it through and comes along as she did yesterday and says, ‘Hello, Mr Quick. I see that you are from Tasmania. How long are you over for?’ That is straightaway. I had never met her before.

Dr Ferguson—Most people would accept it.

Mr QUICK—There are privacy rules and regulations in the banking industry.

Ms ELLIS—I think that the added privacy thing here is the added personal medical information. Privacy, per se, I think—

Dr Ferguson—People baulk at that a little bit.

Ms ELLIS—The commercial world knows more about us than we do already, but I think that in the medical sense it is a different level of privacy.

Dr Ferguson—I think it is. Although, if you ask patients, confidentiality or privacy are not their first priority. They want proper treatment and the best treatment that is possible.

Mr QUICK—But are concerns basically about whether they have HIV, or some sexually transmitted disease?

Dr Ferguson—They might not necessarily want people to know.

Mr QUICK—They seem to be the two flags that come up when you talk about privacy. Their concerns are that their mothers should not know, or that they do not want their parents to know that they have taken a drug overdose.

Dr Ferguson—If you are going to go to the smart card, you can build in parts where the patients can block out certain parts of their history and it is up to the patients' discretion as to whether they pass that information on.

Mr ALLAN MORRIS—Dr Ferguson, what is your depreciation regime on the equipment?

Dr Ferguson—I think that you can claim about 33 per cent a year over three years as a depreciation.

CHAIRMAN—Thank you for appearing before us this afternoon.

Mr QUICK—Sorry for keeping you so late.

CHAIRMAN—It really is important for us to talk to people at the coalface and that is why we are pleased that you came along in your own private capacity to give us your own view of the situation. We will certainly take into account very carefully what you have had to say.

Dr Ferguson—There are some copies of a history that I put in on the computer for myself just to show you some of the benefits that can come up. You can read a prescription and a proper history and summary. On the back page there is a download of pathology and a set of results that has been done. There is a drug chart that could be used in a hospital that could be printed out.

CHAIRMAN—I might ask the secretary if he could take possession of that and, perhaps, pass it round to all members. I think that we would find that very useful. Thank you very much. Resolved (on motion by Ms Ellis, seconded by Mr Forrest):

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 4.59 p.m.