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STANDING COMMITTEE ON ECONOMY AND INFRASTRUCTURE

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Inquiry into primary health and aged-care services

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Professor A. Dart, associate director, clinical, Baker IDI Heart and Diabetes Institute.

The CHAIR — Welcome. Thank you for joining us this morning, Professor. I have a couple of formal bits and pieces to kick things off. I declare open the public hearing of the Legislative Council's Economy and Infrastructure References Committee. Today's hearing is in relation to the inquiry into primary care and aged-care services. Specifically the committee is examining the measurement, including budget measures, of primary health and aged-care services and outcomes. I would like to welcome Professor Anthony Dart, associate director, clinical, from Baker IDI Heart and Diabetes Institute.

All evidence taken at this hearing is protected by parliamentary privilege as provided by the Constitution Act 1975 and further subject to the provisions of the Legislative Council's standing orders. Therefore you are protected against any action for what you say here today, but if you go outside and repeat the same comments, they may not be protected by this privilege. All evidence is being recorded. You will be provided with proof versions of the transcript within the next week. Transcripts will ultimately be made public and posted on our committee's website.

We have allowed 5 to 10 minutes for you to make your presentation, if you would like, and I see that you have prepared as such. We would like to use the rest of the time to ask you some questions as there are some things we would like to explore with you. However, I ask that you begin by introducing yourself and also that you provide your business mailing address so we can send you a copy of the transcript.

Prof. DART — Thank you for the opportunity. I am here representing Baker IDI, which is a cardiovascular and diabetes research institute. I am an associate director. Wearing another hat, I am also director of cardiology at the Alfred hospital, just so you are aware of that. My background is as a clinical cardiologist but also as a researcher with, pretty well, a career-long interest in both cardiovascular research and clinical practice. I am effectively deputising for my colleague Garry Jennings, who is the director of Baker IDI, who is in Canberra today. I am presenting on behalf of Baker at this meeting in support of the submission that Baker sent in, which I was involved in.

Overheads shown.

Just as a very brief background, cardiovascular disease, as you may know, is still responsible for about 50 per cent of morbidity and mortality in our community. What is really important about it, though, is that we have moved a very long way and we have a number of well-defined and thoroughly proven both preventive and ameliorative strategies available to us in terms of clinical management. So there is going to be considerable gain if they are fully implemented, both in terms of preventing illness and preventing the consequences of illness.

Essentially what we think is needed for this is first of all to define the problem — who is at risk, where are they and to what extent are they affected — then mapping what is available to deal with those issues and, where needed, realigning resources, specifying shortfalls and making up those shortfalls. But the definition of the problem is one which requires data on where the problems lie. That is what we need in the general sense for health provision, and in an individual sense we obviously need a way in which we can institute appropriate patient management for each individual. We also need a way of being able to monitor how effective that intervention has been and to keep it contemporary and, if you like, future proof.

First of all, obviously, it is going to be necessary for the patient or, if you think of a well person, the client to be interacting with the health professional. I have put here, though, that of course that need not necessarily be a direct interaction like we are having here. It could be a telephonic one, but it could also be an internet-based one. It could be a website where you are prompted to keep up to date with information, including your personal information. But it needs to be timely — it needs to be in real time. It has to be accurate, and it has to be comprehensive. It has to be comprehensive and it has to be available and contemporary, and of course there is the security issue — it is private personal health information.

Currently, as we all know, there is a vast amount of data in various places to do with us and our health, whether that is the Alfred hospital record system, a primary care health system, a PBS system or a Medicare system. As we put in our submission, though, there are several characteristics about this information. It is very patchy. Some things are very well documented and other things are not documented well at all. It is not automatically kept up to date. It is thoroughly disconnected. There is no internal mechanism for keeping these things linked so that you can extract information from one place and match it with another. Apart from

individual health practitioner records and hospital records, most of the government type of information is not primarily designed for health care; it is designed for other reasons. It is designed to make possible appropriate reimbursement and for appropriate legislative issues with pharmaceuticals and their reimbursements. We use it for other things, but it is not primarily designed for that.

In order to move forward, there would need to be general acceptance both from the professions and from the public of the value of a comprehensive and integrated health record. It will need to be identified what is the essential information that needs to be collected, and then in my view, in terms of my interest in cardiovascular, it will be very useful if there are individual health plans formulated and promulgated and kept up to date on the basis of that information. Clearly there are impediments. It might require resources. A lot of the stuff would probably be there if it was integrated, but there will be some resource implication. There is the question of the current ownership of medical information in terms of who has the final say and what can be done with it. There would need to be agreement on what sort of information could be obtained, and obviously there needs to be concern and adherence to the various privacy issues, including the current privacy legislation at both the federal level and in Victoria.

In terms of our particular interest and why we supported it, there will be enormous benefits for cardiovascular research. In the remit of this investigation, there would be much better epidemiological data about where the risks and the disease lie and its relation to both individual communities and health-care providers. There will be much better ability to properly conduct cost-benefit analyses in terms of whether it was always worth doing what we were doing and whether it could be done better. There will be the ability to conduct proper health system research, in particular how we deliver the health care that we do, particularly in the preventive and the ameliorative space. That would include, for example, good ways of seeing whether we really get value for money from the increasingly very expensive new things we do all the time.

I realise that most of the health-care system tends to be largely federally funded, but nonetheless someone is paying for it and it would be very useful to know — we are paying for it — if it is beneficial. It would also be helpful to us to have an integrated system a bit like they have in the UK with the universal health record — the ability to conduct really big informative resource discovery research by being able to link measurements and information to health outcomes, morbidity and mortality.

Those are basically the reasons we believe it would be both necessary and beneficial if we did have a better system for individual health records and health-care data.

The CHAIR — If I could start where you finished, our inquiry has certainly led us to a great deal of information about current reforms that are under way, including the work that the commonwealth is doing around electronic health records and Medicare Locals. Do you think this will go some way to dealing with the deficiencies in data collection, or do you think there is a greater level for the state government — —

Prof. DART — I think it could go some way, but I am not sure it will progress quite fast enough or comprehensively enough. I am from there, so I know it quite well. I realise the UK system is very different, but with the universal health record linked to things, you can actually do this for a population quite well. If I am a patient at the Alfred hospital and then for some reason I end up at Monash and I have a GP, it is very hard to bring this all together. I think the electronic medical record will do that. Whether it is going to be possible to implement that in one hit and whether or not it is going to be built up from building blocks — like, for example, if in one state we had a universal medical health record which applied to every public hospital, which is a good starting place — that would be very useful, because at the moment we do not. So that would apply to individual health authorities — like we have one for Alfred Health at Caulfield and Sandringham. I know very well that Monash has one for Monash Casey and Dandenong, but they are not the same, so you really cannot integrate that sort of information even at that rather simple level.

The CHAIR — There are separate records for admissions even within the one health service provider?

Prof. DART — They have separate record and identifier numbers. You could not go in and ask them to give the name, address and date of birth; you would need to go to that level. You cannot very easily do it — for example, epidemiological observations. What are the hospital admission rates across the state? You would have to get it individually from each hospital. You cannot do it as a central inquiry.

The CHAIR — There probably is a bit of a way to go between the amount of information available now and the ideal amount of information for the type of work that you do.

Prof. DART — I suspect it is like that in many things. There is a vast amount of information. It is like your own personal information: there is a lot of stuff in your house, but you cannot always find it — it is not really well organised as to the purpose in order to do it.

Mr RAMSAY — Professor, part of this inquiry is about measuring primary health outcomes. Given that you are in the heart area and you mentioned health care, I am just wondering how that ties in with how you would measure the primary work that you are doing as against where it could be improved. I was a little unclear when you were talking about health care — was that a program or was that data that was to be collected?

Prof. DART — We are involved. Putting my clinical hat aside, we are involved in the institute in various GP-related programs. There are various ways and different things you could measure. At a very simple level you could say, 'Is everyone with high blood pressure in Victoria managed to the standard which we as a profession believe there is very strong evidence that it should be?'. There is very strong evidence. I think cardiovascular has probably the most intensively proven research record in what we should be doing of any of the major chronic illnesses. We know very well what your blood pressure should be if you have diabetes or if you have had a heart attack. We know very well what your cholesterol should be under these circumstances. So there is measurement at that level, and I will be doing the things that we know will benefit you. Then there is measurement about actual incidence rates. What is the rate of new heart attacks and new strokes in each community?

Things which are harder to do but which I think would be useful would be: to what extent do we think we are averting admissions? For example, we have been heavily involved in heart failure, which is a condition where the heart fails to pump enough blood around the body. It is not a heart attack, where you have a sudden failure, but it is a very chronic illness with a high mortality rate. It also leads to a lot of hospital admissions. We know that properly instituted primary health care and monitoring and interaction with hospital providers will limit the number of admissions that you have. Now, that is patchy. We run such a program out of our heart failure clinic at the Alfred, for example, for outpatients.

It is not universal. There is no universal system in Victoria whereby everyone with heart failure is assessed for: are they on the most appropriate medication? Do they have a phone line they can ring? Do they know what to do to look for warning signs that they are deteriorating? Do they know to weigh themselves every day? If their weight is going up, this might tell you that things are not going right and they should change their therapy. There are pockets where this happens, but it is quite feasible that you could have this as a universal system whereby every patient with heart failure was linked in to some central repository that could keep track of ultimate daily weight, for example, then feed back advice as to what to do — for example, increase their medication if it was going up, which is likely to be acutely and which is likely to be a sign that things are not going very well. There are lots of things you could do. It is maybe a role for a system, but it is something one could aim to be able to do.

Mr RAMSAY — I was referring to the issues around obesity as well. I am wondering how successful the programs have been, particularly given that 50 per cent of deaths, I think you said, are due to cardiovascular or heart disease, yet you were having escalating obesity problems and diabetes problems in the community, which are related. I guess one issue is: how effective are the programs, and is the measurement right? And what other programs can we introduce to get that message home? Because obviously the community is not hearing it.

Prof. DART — The data on obesity would suggest that it is something we probably have to concentrate on. Motivated people can lose weight — putting aside the surgical treatments, which are very effective but it is probably unrealistic to make them population-wide. I do not think we would have the resources or manpower to do that. Aside from the surgical treatments, taking the consultation-type treatments and the medical-type treatments, weight loss among motivated people is reasonably successful. The problem is that people restore their weight; keeping weight off is the problem. We are only moderately successful at that. We do not have a universal way in which we link in to how we are doing that. If you target a community through an organisation

to try and achieve weight control, you can do reasonably well, but then you need to have in place the ability to sustain that. I think we are not very good at that, because we lose people. Our record system is not very good, and we do not link them in very well. There is reason to believe that we could achieve quite good outcomes.

Mr RAMSAY — By targeting specific high-risk areas?

Prof. DART — By targeting, yes. I think there is scope for that, and you could even start to think about doing things voluntarily. You could start to think about web-based portals for people to enrol in programs where their weight was monitored, advice was given to them and the ability for follow-up was provided.

The CHAIR — Back to that group of people who are already in the system, I am keen to explore the preventative in a little more detail as well. You were talking before about how you might create some sort of Victoria-wide system to ensure that everybody was accessing the best type of treatment — the type of treatment that is very much not in dispute. What would be required to establish that, and what would be the impediments to establishing that?

Prof. DART — I suppose there is the theoretical and the practical. If one was to try to conjure up what would be the best imaginable circumstances, that would be that we would identify what parameters we needed to know; these would be obtained on a regular basis; they would be available to some central organisation which scanned them and which detected when there was a move outside the desirable; and that would feed in a feedback loop — for example, if one had that information available and if we knew the state of everyone's cardiovascular risk profile and whether or not they had cardiovascular disease and that was centrally monitored on an annual or bi-annual basis, when certain targets were exceeded there would be a trigger system to go back.

Let us take, for example, the primary prevention of coronary disease. We know that it is a multifactorial thing. It is dependent on your age, whether you smoke, your obesity state, whether you have diabetes, your blood pressure and your cholesterol level, and you can compute reasonably accurately what your 5-year or 10-year chance of an event is. We know what makes sense, what percentage you need to have to make it urgent to intervene and what the best intervention would be. Ideally, if you had that information on all your adult population and it was reviewed every few years, there would be some people who are currently treated who probably do not need treatment because they do not really fall into that category and there are others who should be treated and who would be sent a reminder saying, 'Look, your data suggests you would benefit from more active treatment of your blood pressure' or 'more active attempts to lose weight' or 'treatment for cholesterol', and there would be a suggestion that they go and get that treatment. That would be an ideal system. It is a case of whether one does that de novo or whether you start off with the higher risk groups.

For example, it would be nice to have such a system for everyone with heart failure, because we know that they are at very high risk. People with significant heart failure have a mortality rate of about 50 per cent over the next 3 to 4 years. It is worse than most cancers once you have significant heart failure, so there would be a lot of gain in making sure all those patients were plugged into a system where they would be optimally managed. Now whether, as I say, you take the niche areas and try to make them models or whether you go for the grand plan, I do not know. But in principle you could do it.

The CHAIR — Yes, I imagine if you were to develop such a system, you could say, 'We will start with the volume turned down and gradually turn it up', because people with heart failure are known to the health system and fairly readily identified. I suppose then by other measures — perhaps age — you could then bring in the next group of people.

Prof DART — It is a little bit like the screening programs for things like colon cancer; they are targeted at the group for whom it is most likely and for whom you will see the most gain. That does not mean that a 30-year-old does not get colon cancer — they do. There are just not that many of them. So to implement a big scheme to try to detect that age group of people would not be very cost effective, whereas if you concentrate on over 55s, it becomes a reasonable thing. The same thing would apply to cardiovascular disease. I have patients who have had an infarct in their 20s. There are very few of them and it is devastating for them, but we would have a big job to show the benefits from screening that whole population to detect those 25-year-olds and 30-year-olds who are at risk of having an infarct. We would have reasonably good success if we went for the over 40s or over 50s, so I agree with you.

The CHAIR — What can you tell the committee about your observations around demographics such as age and geography and the prevalence of diabetes and heart disease?

Prof. DART — Diabetes and heart disease? These chronic diseases, if you like, are all very strongly age dependent. The biggest factor in dying of a heart attack, for example, is really age, and then the others come into play. Age is really a big demographic. There is very good data, not, I suspect, from Australia but internationally, that lower socioeconomic class is associated with poorer outcomes for both diabetes and cardiovascular disease. There is pretty good data that being geographically remote is disadvantageous. It is quite often associated with a lower socioeconomic class as well, but it is also an inability to access adequate preventive and therapeutic health services. Those things are all linked.

Demographic status, for example, tends to be linked to smoking. Smoking rates are higher in the lower socioeconomic class than the higher socioeconomic class. Smoking is obviously a big risk factor for most cardiovascular disease. Poorer diet is too. They are interlinked. So geography will play a part because those conditions are clustered in some communities and not others. Age, where you live, access to health facilities and income status are all involved.

I think there is patchy implementation of the best facilities. We know that if you have a very impaired pumping function of the heart, you have a fairly high risk of sudden cardiac death. We know that if you put in a device such as an automatic defibrillator, that will substantially reduce that risk. We know that is very patchy. If you happen to be in the catchment area of the Alfred, you will get one. If you happen to be living near Shepparton, you probably will not. That is a fault of our system because, firstly, we do not necessarily identify the necessary people and, secondly, the ability to put it in is not necessarily available locally. The system does not really look after those people as well as it could.

Mr RAMSAY — Actually my heart was pumping a bit yesterday, Professor, but I do not think I was anywhere near a cardiovascular heart attack — hopefully not. I had the wrong horse, that was all.

I will get back to the basics. It is a fairly basic question. Where do you primarily get your data from? How does your institute use it in providing an indication of trends to the medical profession? How do we remove the blockages to enable you to have greater access to the medical data to assist with a lot of the research work you are doing and, I guess getting back to my original question, to actually target those communities that are at higher risk, whether it be diabetes, obesity or cardiovascular disease? Is government the blockage in relation to the data they are able to collect and provide to you, or is it private providers?

Prof. DART — We can get some information out of the hospitals quite readily on the number of people who have cardiac surgery or the number of people that have a device or have a coronary stent. We can get that type of data, and we can see what has happened to that — that is at the end.

Mr RAMSAY — What about GPs?

Prof. DART — In the cardiovascular area some the areas where we can look have been sort of NGO-type based. The national Heart Foundation has done periodic surveys on risk factor status across the nation which are relatively unbiased — they take people from different areas. AusDiab, which was a big study — again partly with government funding but mainly non-government funding — on the incidence of risk factors in relation to the likelihood of developing diabetes, on which there is going to be a new survey, has provided very good information.

We can access the national death index, which allows us to see trends in mortality at least insofar as it is validly given in death certificates. Death certificates are not perfect, but they are not bad. So we can access the national death index. We can do specific surveys, as the Baker institute has done — for example, we did a risk-factor analysis survey at Colac by taking resources down there, seeing whoever was prepared to come and seeing what the risk factor status was. We have done the same thing in Bairnsdale. That is a way of doing that.

Mr RAMSAY — Do the clinics provide information? If I have what I believe is a heart attack coming or I am having a heart attack and if I go to my local GP and he writes down the information on a doctor-client basis, does that information then get fed into a sort of a grid where you can get statistics of people who have potential health problems in certain areas like Colac, which has a fairly high socioeconomic demographic?

Prof. DART — No. I do not think there is any way, other than by specifically going and doing the studies, that you will get that comprehensive information. It is reasonably good because of these other organisations or other things, like I mentioned. The Australian Institute of Health and Welfare does quite a reasonable job at this type of national information on rates of things.

At the Baker we have done a fairly big survey on high blood pressure nationally across several hundred general practices in terms of high blood pressure and people known by their general practices to have high blood pressure as to how many are treated optimally and how many fall into the categories of being very poorly treated, poorly treated and well treated. We have that sort of thing. That is what we can base surveys on, and that is the sort of information one can feed back to bodies such as this, saying, 'Well, actually maybe 15 per cent of hypertensives' — that is, people who are identified as needing treatment for blood pressure — 'are not anywhere near treated to the level which would be recommended by the various bodies'.

We can get that sort of information, but we do not have it on a rolling basis, which would be really nice. I knows it is a bit like a modern higher end car with a computer which is monitoring constantly what the status is and telling you that it is due for a service, it needs an oil change or whatever on an ongoing basis against defined end points. That is what it would be really nice to have in a health system, so that you can intervene at the appropriate time — early. I think GPs are well attuned to this. There are care plan systems. They are given financial incentives from the federal system to do this, but it is still a bit of an ad hoc thing: the patients still have to turn up to them and have an interest in it.

The CHAIR — Do you think those incentives are effective?

Prof. DART — I think they help. I have to think. Perhaps we can give the incentive to the patient — for example, give those in a reasonable demographic a \$50 voucher to go along and get themselves checked out to get this information and enrol in a health maintenance plan whereby we would know what their weight, blood pressure and blood sugar and glucose levels are and we would do that every two years. That would be centrally recorded, and the patients would get feedback as to whether it would be sensible for them to discuss possible treatments with us.

The CHAIR — A number of the private health insurance providers are into those kinds of programs, aren't they?

Prof. DART — They will do that, yes.

Ms PULFORD — I see them advertised on billboards.

Prof. DART — We rely a lot on en passant — someone happens to be there for some other reason. You rely on the GP, primary health provider, district nurse or whatever obtaining this other information, but it is not systemised. You could envisage a system where you could try to gradually enrol all the adult population in terms of cardiovascular disease and diabetes in some health maintenance system aside from the private system. It would be nice to integrate it with the private health system too, because we have talked about it. A substantial number of people get their health care or at least some of their health care through that, so it would be really nice to have that integrated so that it was maximising their individual benefit.

The CHAIR — I probably should not have gone there. Our terms of reference are broad enough without involving that at this stage, but when everybody is trying to get to the same end, hopefully our work on this can assist at least a little bit.

The data that the Department of Health collects shows us that diabetes-related conditions are the major cause of avoidable hospitalisations in Victoria. Do you save that information? Do you use that data?

Prof. DART — Yes, we would obviously have it from the public hospitals because of the way in which the funding is linked to the reason for the hospitalisation. It is a slightly murky area, I have to say. Again, funding comes into it, but we do at least know the number of people who are admitted with defined illnesses and what is recorded as the reason for their hospital stay. Diabetes would feature in that, so that data is reasonably good.

The diabetic population is admitted for a number of different reasons. They are not admitted all that often for the control of their diabetes. We do not get a huge number of admissions for that but for their diabetic complications. One of the reasons diabetes becomes very prominent in hospital statistics is that some of the complications diabetic patients are admitted with include, for example, vascular problems, ulcers and infections, and they tend to be very chronic admissions. At the Alfred many of our really longest staying patients, and I am talking about people staying more than 100 days, are diabetic, and for many of those the reasons are because they have hard-to-heal ulcers or hard-to-heal infections. As a resource-utilising group, they are quite high — much higher than the number of admissions relates because their length of admission tends to be very long. That is related to the nature of their diabetic complication. They are also therefore admitted because of their propensity for cardiovascular disease — that is, heart failure, heart attack and stroke.

The CHAIR — They are a large proportion of admissions and an even larger proportion of long stay for bed nights.

Prof. DART — If you have the integration of patients and days, then they constitute a substantially higher number than you would think because many of the stays are very long.

The CHAIR — So for avoidable hospitalisations, what would you recommend as the things that could help avoid those avoidable stays?

Prof. DART — You would look at those conditions which lead to particularly repeat admissions, or if they are diabetes, long admissions. Good diabetic management would be one thing; heart failure would be another thing which leads to multiple admissions. One of the goals in heart failure management is to keep people well outside hospital. In the ultimate sense, if you have a good ability to influence risk factors, to prevent cardiovascular disease occurring and then to prevent reoccurrence, that will also translate to fewer hospital admissions. I think that both in terms of diabetes and heart failure helplines or contact advice would help. Heart failure clinics work really well when they have good paramedical support — for example, dedicated nurses who are available to deal with phone calls about suggesting alterations in medication or suggesting increased restrictions in fluid intake. Similarly for diabetes in terms of tightening up on diabetic control, suggested help. Those things would prevent admission and readmission.

The CHAIR — Would earlier diagnosis be helpful too?

Prof. DART — We do pretty well now with patients who present to hospital with a heart attack in the metropolitan area. We do much less well in the regions and in the non-metropolitan areas. We still do not too well with people who have out-of-hospital death. That number is still quite high — that is, people who die before they reach hospital. Those people are the ones you would hope that if you had good primary intervention strategies to identify their risk factors — perhaps diabetes or obesity or whatever — and you could institute the preventive measures earlier, you should reduce the number of people who fall into that category.

The CHAIR — Thank you. It has been great to explore these issues. We thank you for your time and for bringing your considerable expertise. Do you have anything else you would like to add?

Prof. DART — We have actually not done badly, although we still have a lot of unmet need if you look particularly at cardiovascular disease. Obesity may be a spanner in the works going forward, but we have done quite well over the last 20 to 30 years in bringing rates down largely through attending to what we know are the causative factors: smoking, cholesterol, blood pressure, diabetes or whatever. It would suggest that the society will get return from going on along that track in trying to reduce that further, if we could move everyone out of the high-risk or intermediate category into the low-risk category. We have to die of something, so I do not think we can obliterate all cardiovascular disease and all cancer. But I think we can clearly push it back to avoid premature such disease. The evidence would suggest that we have made good gains, and we have more to do. So, yes, I think primary care would be the place to start.

Mr RAMSAY — We have actually done a very good job on smoking. I cannot remember the stats, but I think we have cut it by 40 per cent in a short space of time. Is there a transition from smoking, fatty foods, alcohol and lack of exercise to good foods?

Prof. DART — With these sorts of initiatives, wearing a completely different hat, we were discussing at the Alfred executive the other week the introduction of the red, orange and green highlights for food. I do not know if you know about this.

The CHAIR — Yes.

Prof. DART — I think it was an initiative of this government or the last government — I do not know — to try to get people to recognise what are healthy foods and what are not healthy foods, and there is the notion that we should have predominantly only green food available in the hospital setting. I know from colleagues with younger children that that is promoted in schools as well. So these initiatives can be done. You tend to get people to be aware. We have certainly done a fantastic job, and the government has done a fantastic job over multiple governments in smoking prevention.

The CHAIR — That is right, but there is always more to be done in the preventive health area.

Prof. DART — Yes.

The CHAIR — You have certainly given us some good information to assist us with our work, so perhaps we can wrap up. Thank you, Professor Dart, for joining us this morning.

Witness withdrew.