

CORRECTED VERSION

STANDING COMMITTEE ON FINANCE AND PUBLIC ADMINISTRATION

Inquiry into public hospital performance data

Melbourne — 17 August 2009

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Witnesses

Prof. J. McNeil, head, school of public health and preventive medicine, and

Dr S. Evans, associate director, Centre for Excellence in Patient Safety, department of epidemiology and preventative medicine, Monash University.

The CHAIR — I welcome Professor John McNeil, the head, and Dr Sue Evans, associate director, of the school of public health and preventive medicine at Monash University. 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. Any comments made outside the precincts of the hearing are not protected by parliamentary privilege. All evidence is being recorded by Hansard. Witnesses will be provided with a proof version of the transcript in the next couple of days. I would now invite you to make an opening presentation, and we will then proceed to questions. The committee members have copies of your presentation, so we can work from the hard copies.

Prof. McNEIL — Thank you very much. I will introduce myself just briefly. I am the principal investigator of what is known as the NHMRC Centre for Research Excellence in Patient Safety. Sue is the senior research fellow and executive officer. Both of us have an interest in measuring and improving the quality of care given in all hospitals — public hospitals and private hospitals. I am afraid my presentation has failed me, but you have a printed copy in front of you which I hope you will be able to follow.

Could I point out initially that quality improvement is one of the big agendas going through health care at the moment; it is of interest everywhere in the world. Part of this is because of a realisation that not all health care provided is of good quality. Some is of excellent quality but it varies. Sometimes it varies for reasons we know about — for example, some people follow the guidelines for treatment well and others do not. There are other more subtle reasons — there are issues of leadership and morale and so on and so on. It is very important to identify this. One of the aims of our centre is to study ways of measuring and improving quality of care right across the board. Our centre therefore examines the best ways to measure and report on the quality of health service delivery. Therefore when we heard that you were looking at this issue specifically, of course we were very keen to be able to come and just make a few very brief but I think important points.

In the last couple of weeks there has been the report of the National Health and Hospitals Reform Commission. There are a couple of pages on the importance of measurement. One of the major focuses of this report is the improvement of measuring and reporting on hospital quality. I just quote two things. The report recommends systems to:

... provide comparative clinical performance data back to health services and hospitals, clinical units and clinicians ...

It further states:

... a nationally consistent approach is essential to the collection and comparative reporting of indicators which monitor the safety and quality of care delivery across all sectors.

They are just two of a large number of similar comments which go right through this report and create a dominant theme.

Just moving on to slide 4, having been a member now of three public sector boards — the Alfred hospital, the ambulance board and currently the Austin Hospital board — I think anybody who is in that position is aware of the extensive measurement of financial performance. At every board meeting we see reports of how much money has come in, the cash flow et cetera. This contrasts with the amount of information which we routinely get on quality of care, which is really very minimal and really quite inadequate.

One of the important, as I said, agendas is gradually to work out how to improve this. Only a very small percentage of the information we do get on quality is actually what we might call 'respected' — respected by people enough to think, 'Gee, I believe this, and I need to take this care and do something about it'. A lot of it is regarded as of minimal credibility. That is a big problem. Part of this is because there has been too much reliance on very cheap and unreliable measures of quality — for example, a hospital death rate. People's likelihood of dying is largely determined by how sick they are when they come into hospital and whether the hospital has an ability to transfer the very sickest patients to somewhere else before they die. Measures like death rates have very little credibility for us. We want to measure, hopefully, much better and more respected measures.

The next thing is: why do we measure? In some ways there is a good analogy here to football, because you could have a very, very good football match and not keep the score. You could talk about it afterwards and discuss whether you could have done better or whatever, but it is the keeping, it is the figures, it is the information you collect, the score that is kept that enables people to identify how they are performing relative

with anything else. It is really the score which creates the pressure for improvement. One of the things that we believe in our centre is that if we kept more good information so that if, for example, you were a cardiac surgeon or a proceduralist and you could see how well you were doing in comparison with other doctors and with other units, it would stimulate you to do better, to try harder, to examine, just like it does in the football match.

There are a lot of other benefits of measurement as well. Apart from stimulating by benchmarking, it helps identify the very good and the very bad performers. We want to know why the good performers are good. Sometimes it because of issues like morale and leadership and so on. There is a lot of work to be done to identify what makes a really good hospital unit so that other units can learn from it. We are very keen to assist in training in credentialing. It is very important for us to know, for example, where we should send our trainees in cardiac surgery. We want to send them to the best places. We want to send them where they can do a lot of cases. At the moment we have minimal information about this sort of thing.

We want to measure access to care — people having access to coronary angioplasty or radiotherapy. Are they missing out? Are the various units complying with what they should be doing for treatment? And what are the trends? Are there trends in health care? Is there a need for more angioplasty units or whatever? All of these are reasons why we need to measure things much better than we are doing at the moment. That is one of the reasons why I think Sue and I feel grateful to have been invited to this committee to be able to give this view.

Moving on to the last slide, one of the most important ways of measuring the quality of health care is through what we call clinical quality registries. I have put in a little diagram there which just shows how the registry works, but basically it means that every hospital that is doing a procedure — for example, cardiac surgery or treating burns or using hyperbaric therapy or whatever — will send a little bit of information to a central area where it is all collated. The outcome of this treatment is recorded and reported back to doctors. This is already happening in some important areas, like, for example, in cardiac surgery in the state or in renal transplantation. But not enough of it is being done. There are some big areas, like, for example, a lot of the cardiac procedures and device implantation and so on, which are increasing rapidly in use and expenditure where there are no similar records and which, I think, is a major deficiency in medicine in Australia.

Right at the top of the next page I just want to show you what I mean by ‘benchmarking’. This is a simulation, but it is a simulation which has been provided now in one area of medicine — in renal transplantation. There are a lot of units in Australia doing renal transplantation; transplanting donor kidneys into people who have very advanced kidney disease. Basically, one of the best ways of measuring how successful this procedure is by how long the kidney graft lasts. Gradually, as the years go by, the kidney starts to fail, and if you are not looking after these patients very well, or if you have not done a great job at the beginning, then these grafts tend to fail and people then have to give up their transplant and go onto dialysis.

Every year or so all the renal units in Australia get a little graph which looks a little bit like this. They get a little forest of those dotted lines which shows the performance of all the other units in Australia that are doing this. And then there is a dark line which represents what their performance is. You will see the dark line suggests that this particular unit is losing a lot more grafts; its grafts are failing.

That information has been fed back about this particular condition for about the last 20 years, and it is widely regarded as having pushed up the performance of kidney units in Australia until we really are in this area at the very leading edge of world-class performance. But we get very little of this. I should say that the units that have had a poor performance like this in a run often have called in consultants from interstate to look at what they are doing. Can they find out anything that we are doing which could make our performance better? This is what we call reliable benchmarking data which is accepted by the renal units which they value and which really these days I do not think they could do without.

The second issue shows another totally different part of medicine. It shows the outcomes for people who have had cardiac surgery for blocked coronary arteries. When surgery is done and the arteries are unblocked and the graft is transplanted, then one of the measures of how well the surgery has been done is by counting the number of people at the end of each month who have died after angioplasty — I am talking about passing a little catheter and blowing up a balloon. If this is not done very well the person may either die or they need to have an urgent operation to unblock the artery. You add up the number of people who have had urgent surgery or who have died, and you will see that on the top line. You will see that the units which do not do terribly many have

quite a high level of people dying or needing an operation, but gradually as you do more and more — you will see that as you go along the bottom line — it shows that you progress from doing 50 a year to 100 a year to 150 a year, and by the time you get to about 80 a year, your performance has got down to a level which has stabilised. That tells us a lot about where we should be and how many of these procedures a unit should be doing before it gets to top quality.

This is the sort of information which is really valuable in clinical medicine and which we are not supplying. I just want to emphasise that it is a very frustrating experience for someone in my position going to a hospital board meeting and seeing reams of the most detailed financial data but seeing so little about the reason why the hospital is actually there and working.

We are not too doctrinaire, because we do not believe that you can measure every part of medicine, but there are some things which are just so important that we think that it really is worth putting in the investment. Things like coronary procedures and the new devices which are going in — pacemakers and things — are just rocketing up in use. Those sorts of things need to be measured. We believe that really serious thought needs to be given to providing the relatively small amount of resources needed to do this in a standardised way, certainly across Victoria but also across Australia.

There are a number of registries already around. There is a trauma registry in Victoria which has been a fabulous success, and which people from interstate and even overseas are looking at. There is renal dialysis, there are various cancer registries and an intensive care registry, but there are some very big holes in this area where there are not registries at the moment and where they are needed.

Some people have said it is too expensive to collect this data and that we should be putting this money into patient care, and that is a powerful argument because a registry may cost \$1 million a year to run. But I just want to point out that if it had not been for the renal transplantation registry, which has gradually pushed up the success rate of renal transplants, then everyone who fails a renal transplant and survives at \$10 000 a year goes on to dialysis at \$60 000 a year. You do not have to push up the performance in renal transplantation much to save all the costs of a lifetime on dialysis.

It is the same thing with acute coronary syndromes, for people who come in with acute chest pain and who need a balloon passed into their coronary artery. If that is done well, very little heart muscle will die and the heart will keep functioning, and the person was probably lead a good life. If there is a poor performance, and the poor performance could be delays in the ambulance, delays in the hospital, poor operator performance, all sorts of things. If it is not done well, the heart muscle dies. The person then gets heart failure and is out of hospital. How many cases of treatment for heart failure will it cost to outweigh the cost of setting up a good data performance which will drive up the performance in the best place?

It is the same thing with stroke. We know the outcome of stroke varies. If we pushed up the performance in stroke, it could save people a lifetime in a nursing home. I guess what I am pointing out is that there is a cost of not investing in this fundamental data which doctors will look at and find very credible.

Over the last few years there have been efforts to try to get data on the cheap by just looking at the administrative data which comes through a hospital. But I guess for some years we have pointed out through our centre that this is really not a sensible way to go. The data which is collected in hospital has to be what we call epidemiologically sound. That means it has to be reproducible. If we send in a research assistant to a hospital, they have to be able to pick out the data easily, and if we send in 10 research assistants in, they will come back with the same answer. There is a big problem with a lot of the data we are collecting because it is not epidemiologically sound; it is based on judgement and so on. We will come to waiting lists in a second.

We have done quite a bit of research in the waiting list area, and I note you have a specific interest here. When we talk about epidemiologically sound data, unsound data is an urgency category. Really there is a lot of disagreement about whether a person needs an operation within 30 days or 6 months or so. That can be seen in the next slide, which I am sure is familiar to you. It shows data from 2001. Basically, it shows a number of the major hospitals in Melbourne and looks at the percentage of people who were scheduled for hip operations, and who were scheduled as categories 1, 2 and 3. You can see that some hospitals put a high percentage of patients in category 3, others put quite a high percentage in category 1. The reason for that is because what is the difference? It is just pure judgement. Two people seeing the same person could come, easily, to a different

view. One thing which we would like to point out is that it is a waste of time collecting data which is just so dependent on judgement, when you have to look at sound data. Sound data may well be a waiting time for a defined procedure, which is easily reproducible; the time from a person being referred to the hospital to the time the procedure is done. There is no obscurity about that; it is totally simple to measure and it is objective, and any two people will come to exactly the same answer.

At this point I just want to point out, though, that whenever you collect data in the health system, you have to have a quality assurance system to do it. It is just like anything else. If you collect financial data, you need an auditor; if you collect clinical data, you need a system, where at least a little bit of it is checked to see if it is accurate, because if no-one bothers checking, then no-one takes it seriously. One of the big problems in a lot of the data which has been collected is that there has not been that system for checking that would be taken as absolutely fundamental for any other form of financial data.

I move on to this summary slide in the middle. It is really the summary of what Sue and I would like to say to you. Measurement must become a routine quality reporting system, just like the financial reporting. We have got a way to go, but we have got to start this journey. I personally think that Victoria actually leads the country in this, but we are still only a little past the starting line.

We have to be careful of what measures we put forward, because a lot of it is not regarded credibly within the medical profession. I gave you the example of death rates, but there are a lot of others as well. Unless the measures are respected and believed in, then nobody will really take them seriously. They have got to be costed into clinical care. There is a lot of work that has got to be done by people who span that area between clinical medicine and clinical research.

With your indulgence, I would just make one brief mention about some work which we did with prostatism, which is where the prostate gland swells up and it makes it difficult for males of 55 and onwards to pass urine. We did a little study which demonstrates something relevant to your consideration of waiting lists very well. I point out that we had a research assistant who went around to a number of hospitals in the state and actually took individual patients who had prostatism and who were on the waiting list, and actually just took their history. She took a history, firstly, of their medical condition, and here in this bottom side is just a typical example, this is an actual patient.

He is a 55-year-old man. He has had a sensation of incomplete emptying of his bladder. He gets up 9 to 11 times at night to pass his urine. He almost always has to strain. He always has a weak urinary stream and so on. That is just a little description of what he told us. Then on the other side of the slide is his psychosocial history. It is a little bit about the man himself. He is not happy with his quality of life, he has to — it is a bit difficult reading this.

Mr TEE — Getting cold.

Prof. McNEIL — Yes, he is getting cold, he drinks a lot because of his diabetes, he has no energy for work, he is a pensioner, he sleeps alone because he snores, he does not want to go far on long trips because he is concerned about his bladder, shopping is okay as long as there is a toilet. He is frustrated at not being able to do much et cetera. This is the typical sort of history of a person with prostatism. We took those little vignettes, like that, and we gave it to a number of urologists who specialise in this sort of surgery, and we gave it to a number of other doctors and a number of lay people.

We published this article in the *Australian Journal of Surgery* a few years ago now, but the bottom line was that when we asked these people to take men like this and rank them, we found a lot of variation, even in what the urologists conceived as their urgency of treatment. There was an even bigger difference with the general practitioners and the lay people, so creating urgency categories is really tricky. It is not an epidemiologically sound measure. Internationally there has been a trend to do things which are much more simple, which is to just look at, for example, the 90th percentile of the delay between a person being referred and a person being operated on.

Those are the two key issues that I wanted to make, that measurement in medicine really is a bit trickier than just having the idea of measuring waiting lists. Also there is a long way to go, but it is very important work, in measuring the quality of care delivered in hospitals. I applaud the work of this committee in examining this

issue and would be very pleased, with Sue, to answer any questions, unless Sue wants to make any other comments.

Dr EVANS — No, thank you.

The CHAIR — The committee thanks you very much for your submission and for the presentation this morning. You are certainly doing some very interesting work which is of relevance to what this committee is looking at. I am fascinated by your experience also as a board member of one of our hospitals, and the type of information you see. You would be familiar with the *Your Hospitals* report, which is the public release of information from the Department of Human Services on hospital performance. What is your professional view of the data that is collected and disseminated through this report, and its value against the criteria that you have outlined on, effectively, your summary side?

Prof. McNEIL — It has got a long way to go; that is my basic view. I think that, as I said, the bottom line for us is that there has been a seriously inadequate investment in the sort of data which is going to engage the doctors. It is done well in a small number of areas, but there are very big gaps which need to be filled.

The CHAIR — I do not know how familiar you are with the report, whether you can comment on particular categories?

Prof. McNEIL — No, I wouldn't, it is a while since I have looked at it.

The CHAIR — You are a board member of Austin Health, I think you said?

Prof. McNEIL — No, I am at the Austin hospital at the moment. I have previously been on the Alfred, and the ambulance.

The CHAIR — You were critical of this issue. Do you get better data than is published in this report, in terms of the value of assessing the actual clinical performance of the hospital, or is there a similar type of dataset that you see?

Prof. McNEIL — I would not like to comment on the Austin because I have only just joined the board there. Certainly in the ambulance I thought the data was really excellent. I thought the performance data that we got from the ambulance was superb. I chaired the quality committee on the metropolitan ambulance board, and gradually over the last four or five years it went from being good to being probably one of the best in Australia, in fact internationally probably. Part of that was because of a transfer of measures. To measure things like, for example, pain relief, it systematically measured the pain of a person when they were picked up and when they were delivered in hospital. Every board meeting we were able to look at this performance and see that we were doing well, doing better.

The CHAIR — In terms of this data, essentially you are saying we need to get away from any measure that relates to urgency, as is currently being assessed.

Prof. McNEIL — Yes, unless you can get agreement as to what urgency means, and test it so that you can show that any 10 people will mostly assign a person to the same urgency category, because when you cannot, that is what causes this big difference in the way that urgency categories are interpreted.

The CHAIR — Yes, the slide showing the 2001 hip operation, I think you said.

Prof. McNEIL — Yes, that is right.

The CHAIR — I could not read it very well, but I think that is what you said it was.

Prof. McNEIL — Yes, I am sorry, it would have looked much nicer on the screen.

The CHAIR — On that issue first, can you expand on your comments about using the 90th percentile as an alternative measure of urgency, how that would be employed in this type of data as an alternative to the urgency measure?

Prof. McNEIL — One of the things which I think is important is that the waiting time in a hospital is not terribly relevant if a person has to wait a very long time to get an appointment in the hospital in the first place. I guess my suggestion to you would be to consider the time between a person being first referred and then being actually operated on. Now there is always the odd reason why a person will be delayed — they may become sick — so there will be a tail of people who do have long waiting times. But if you take the 90th percentile, then you allow for those people who you probably have little control over and you look at what happens to the large bulk of people, and I have suggested the 90th percentile. As you know, in ambulance work the 90th percentile is used to quote for response times, because occasionally for one reason or another they just cannot —

Mr DAVIS — It takes the exceptional out.

Prof. McNEIL — Yes, it takes the exceptional out and gives you a good measure, I think, of the overall performance.

The CHAIR — The other measures that are not urgency-based in this dataset — measures of time on trolleys and so forth — do you see any value in those measures?

Prof. McNEIL — Would you have a spare copy?

The CHAIR — Certainly.

Prof. McNEIL — We look at so many reports I am afraid it is hard to remember which is which. Sorry, what was the question?

Dr EVANS — Time on trolleys was the question, in the emergency department. I think that if you can measure that reliably, it is probably a good measure of quality. If you know when they are arriving in the hospital to when they are getting a bed, then I would say that would be epidemiologically sound data.

The CHAIR — Do you have a view of the integrity of that data? You may have seen there has been some public commentary in recent months questioning the integrity of that data. Do you have a professional view as to the integrity of how that data is collected? Have you looked at that issue at all and formed any view?

Prof. McNEIL — I have not.

Dr EVANS — I have not, no. My understanding is that when they are triaged at the reception desk they have a time stamp, but I have not personally been able to look at the data to see whether that is done well.

Prof. McNEIL — Most time data can be measured reasonably accurately and systems can be put in place.

The CHAIR — In terms of expanding the registries you spoke about, what has been DHS's interest in undertaking that work? You have mentioned \$1 million a year per registry, or would that come down if you increased the number of registries that were set up for different procedures?

Prof. McNEIL — No, we have been mainly interested in cardiac procedures, not cardiac surgery but all the other cardiac procedures, particularly angioplasties where the balloon is put in. Recently we have done a brief costing that suggests that if we were to collect the whole 70 000 or 80 000 of these procedures every year in Australia and report to every Australian hospital, it would probably cost us about \$3 million to \$4 million to do that. Of that, probably \$1 million would need to be spent in Victoria. There has been a lot of consideration about the funding model to do that. I guess my attitude is that the measurement is such an important part of doing it that a little bit extra should be paid on top of the normal DRG, just so that we can get a report on what was done and what the outcome was. We estimate that that would probably be another \$30 or \$40 — probably closer to \$40.

The CHAIR — Per procedure?

Prof. McNEIL — Per procedure.

Dr EVANS — And there are certainly registries that are supported by DHS. The VSTORM, the trauma registry, is supported by the department, and there are others that are supported by the commonwealth. The ANZDATA has quite a large amount of money from DoHA. There are also registries that have been given

some funding through research projects, from research grants. The Australian Commission on Safety and Quality in Health Care has also funded some registries of late. It is a little bit piecemeal.

Mr HALL — Is it compulsory for hospitals to feed information into those registries?

Prof. McNEIL — No. The trauma registry I think is, but by and large it is not compulsory. The renal society, the Australian and New Zealand Society of Nephrology, I think takes a very dim view of any renal unit which does not report. I gave a presentation to the Australian Council on Healthcare Standards a few weeks ago suggesting that in its program of accrediting hospitals it should bring in as a measure the question: ‘Are you reporting to registries?’. Because if a hospital was not reporting to an established registry, that to me would be a really serious omission and something which should be commented — —

Mr DAVIS — Could we have a copy of that?

Prof McNEIL — Yes, certainly; I would be delighted to give it to you.

The CHAIR — Thank you.

Dr EVANS — And you could say the same of the joint replacement registry, which is a registry taking data on all joints that are replaced. It has a 97 per cent recruitment rate to its registry, so just about every hospital in Australia that is performing those operations will be providing data to the registry. I think that is because largely it has a lot of support from the society. It credentials its orthopaedic fellows based on their contribution to the registry.

The CHAIR — You would have to wonder about the performance of the other 3 per cent.

Prof McNEIL — The trauma registry is worthy of comment because that was established in Victoria and, as I mentioned, is seen even internationally as one of the best trauma registries in the world. It picks up a little bit of information about every person who is severely injured in Victoria and tracks their course through the system if necessary. When the trauma system was reorganised in Victoria, as you know, they changed things so that if you were severely injured, you would be taken to a major trauma centre unless you were more than 30 minutes away, in which case you would then be taken to a secondary hospital, stabilised and then possibly sent on. There was a little bit of nervousness, I think, when that was first brought in — would it work or would it lead to even worse outcomes?

Some people from our department published a paper in the *Medical Journal of Australia* this year showing that in the five years since that change in the trauma system in Victoria the actual performance, the death rate from severity-adjusted trauma — that is, trauma which is of the same level of severity — had fallen by about 30 per cent. That gave a wonderful endorsement of this change in the system. That is the sort of information which we believe in. That is credible. We think that is great. But we need more of it.

The CHAIR — I am conscious that my colleagues need to ask questions as well. Finally, how does the trauma registry address the issue of clinical judgements? The issues you spoke about earlier were death rates and assessing urgency on hospital waiting risks. Presumably every trauma case is different. How do you address the issue of judgement when benchmarking trauma cases?

Prof McNEIL — Trauma is different to — —

Dr EVANS — There is a severity score. It is a validated score that each person gets given by the ambulance and then in hospital and then on discharge. It rates objective measures of whether the patient was intubated, what their Glasgow Coma Scale was, which is basically whether their eyes were dilated and the measure of their neurological status. They are very objective measures, which takes out the variation that can occur. A sum of all of those will give a severity scale of that patient.

The CHAIR — Could a similar set of metrics be developed for ordinary hospital admissions, in terms of assessing urgent and semi-urgent et cetera?

Prof McNEIL — That is a really good question. We have done a fair bit of work on this. The answer is probably yes, but the urgency for surgery has two dimensions, really. It has the medical dimension: is the person in pain, are they disabled and so on? But then there is the social dimension: is the person supporting a large

family and cannot work? Is it causing a lot of social distress? They are judgements which are at the moment made a little bit informally but still some people would say are quite important. I guess we have been really keen that we do not put a straitjacket on where you just operate on a person because of their pain and you have no capacity to look at, particularly, extreme situations of psychosocial necessity.

Ms BROAD — Thank you, Chair. Professor McNeil and Dr Evans, thank you for your submission. I expect that when any one of us has to undertake a procedure in hospital we would like to go to the best-performing hospital and treated by the best-performing clinicians, so performance measures in that sense are important to every member of the community. In your submission you state:

For performance measures to have measurable impact on improving outcomes, it is important that measures are chosen very carefully and that there is a clear purpose to which they are being put.

You particularly underline clinical credibility in order to see positive change in practice. Can you elaborate for the benefit of committee members how you think in a practical sense you can go about determining the selection of performance measures in that sense of ranking importance of measures and the purpose to which they are being put?

Prof. McNEIL — That is a tricky question. The most important thing that we have suggested is that the measures have to be carefully chosen. That sometimes takes a bit of research, but you have to measure things which are affected by quality of care. That is one of the reasons I gave the example of kidney disease and the time it has taken for an organ to fail, because that is easily measurable. Nobody doubts whether it has occurred or not. As well as that, kidney doctors would generally say, ‘Yes, this is an integrated measure of the quality of care’. For example, if signs of rejection were to appear, very good units would get onto that very quickly and use drugs to keep the kidney in place and so on. If the unit is performing poorly, then there may be delays in the time taken for this to happen. That is what we regard as a measure which is objective, which everyone agrees on, which is easily accessible out of a person’s record but which also is a measure of quality of care.

That is one of the reasons why it is different, say, from a death rate. Most doctors who work in hospitals would say that they can tell with 90 per cent probability who is going to die from the moment they see them in the emergency room. Quality of care makes only a tiny difference really, and then it is so distorted by the patterns of some hospitals being able to transfer out their severely ill patients before they die and others not. As a result of that, the measures just have such limited credibility. They can occasionally if it way off the scale, but that hardly ever happens.

The second thing that is really important is that we have come to realise that there is no global measure of hospital quality. You cannot go to the Alfred hospital and say, ‘This is a great hospital’. You have to measure all the components of what it does. It treats trauma — how good is it there? It treats heart disease — how good is it there? It treats kidney disease — how good is that? There is no general measure. That is why we have regarded the measurement of quality as like having probes in the pudding. We cannot measure the whole lot, but we have to select a few probes in critical places and see how good the performance is in these particular areas. That is one of the reasons I have suggested that we have to be really careful how we measure. Measurement is expensive, so we have got to really focus measurement on where it matters most and where if you do not have good quality of care, you are going to cost a lot of money and you are going to create a lot of ill-health and so on as a result of the poor quality. I hope I have answered your question, tangentially at least.

Dr EVANS — Just to add to that, each specialty will know what measures are important. Some of them will be outcome measures like complications, wound infection. Some of them will be process measures — processes of care, whether they received care in a timely manner. They are out there. There are good quality indicators that have been developed by clinical groups — from cancer et cetera. Anyone has got that; it is just a matter of applying them within the setting of hospitals.

Ms BROAD — Just in follow-up then, beyond professions having their own ideas about what they think matters most, in a practical sense how would you go about choosing between a range of performance measures in a particular area in determining relative importance?

Dr EVANS — I would be thinking about the volume that a hospital is doing and the cost of the procedure. We generally look at high-cost, high-volume procedures where you should probably in the first instance invest resources in measuring.

Prof. McNEIL — Also, there are a lot of registries overseas. This is part of an international effort. We would look overseas to see what measures they are doing, then we would ask, ‘Does that make sense in Australia? Can we easily get that out of Australian records? Do we do things the same way?’. As Sue said, it is a little bit tricky. With a procedure like the heart procedure we can measure the outcome: we know what sorts of things reflect quality of care and we can measure it maybe a month later. But when we are treating diabetes or high blood pressure or something like that, the outcome of our treatment is 30 years down the track. We cannot measure outcomes there. We have to measure simpler things like, for example, ‘Did the doctor follow the guidelines that they are supposed to be treating, that people accept?’. Compliance with guidelines is a much more valuable measure for anything that is long term. An outcome is much more important for a surgical procedure or some treatment like hyperbaric therapy which is short term. Does that make sense?

Ms BROAD — Yes, it does.

Mr HALL — Just a quick question: should the hospital performance measures that you have been advocating be publicly reported?

Prof. McNEIL — That is an area which has been debated. My personal view is that in new areas where we are just starting off there are a lot of technical difficulties to be sorted out. One of them particularly is in risk adjustment, because you cannot compare a hospital which, for example, has the most difficult cases referred to it with a hospital which does easy cases. We have to work out, ‘How do we readjust for this?’. That is a really difficult area of science, because we have to adjust for anything that doctors in hospitals cannot control. They may not be able to control how many elderly patients they get, how many difficult referrals they get, but we have to be able to measure that if these things are credible. Therefore our advice has been that for an interim period after we set up a new measuring system the data is held relatively confidential while we work it out. But as soon as there is agreement, then it becomes public.

Mr HALL — What might that interim period typically be?

Prof. McNEIL — Three years.

Mr HALL — Would those measurements undertaken be shared at a board level, would you suggest, or at a government level or a department level in that confidential interval?

Prof. McNEIL — I think it should be a graded process. Maybe for the first year or so to the doctors themselves, then to the administrators and boards and then subsequently released publicly. That is an off-the-cuff answer, but it is that sort of thing. It is not because of trying to conceal things. If you release data which no-one believes, you can do damage. For example, there was a lot of concern when they went to release cardiac surgery data in New York: people just did not want to operate on the more difficult cases. Why would they when they will appear in the newspapers as bad surgeons when they might actually be the best?

It is very difficult also choosing the issues to risk-adjust for. You might say, for example, in kidney transplantation that the duration of what we call ‘cold ischemia’ time — which is the time between the kidney being taken out of the donor, put in ice and then transferred somewhere to be transplanted into someone — has an impact on the outcome of the surgery. Some people would say, ‘We should not be held responsible. We cannot control how long a kidney takes. If you are in Cairns and the kidney has come from Adelaide, if it is a long period of time and we should adjust for that’, but on the other hand some hospitals cannot get their act together and take ages to open an operating theatre and whatever, and the kidney sits there, and that may be one of the explanations. These sorts of things have to be teased out by people who understand the medical side, who can understand the statistical and measurement things. That takes a little bit of time but gradually we move to a situation where everyone accepts, yes, this is what we will do, and that is a good time then to start releasing the data: people believe it and are prepared to act on it.

Mr HALL — How do you address the truth-in-reporting issue? Is that by your auditing process?

Prof. McNEIL — Yes. As epidemiologists we know that you have to audit all data that comes. Basically that means that you have to go back to the source records, because if you do not do that, how can you have confidence in the data? This data will increasingly be important. It will be important for people’s careers, for hospitals’ reputations and so on, so it has to be subject to audit just like financial records.

Mr HALL — And who should do that audit?

Prof. McNEIL — I think it should be done by the people who are responsible for collecting the data. For example, we run the trauma registry. We are under contract to the state health department and it is built into the contract.

Mr HALL — So someone independent of both the provider and government?

Prof. McNEIL — Definitely, yes — certainly in that case.

Dr EVANS — There are clinical networks that are set up by the Department of Human Services that exist for a number of conditions. We think that perhaps they might have a role in that interim process between collecting the data and publicly reporting it. They are multidisciplinary teams that consist of people from the department but also clinicians from all around Victoria coming together who could play a really big role, I would think, in looking at the data and validating it.

Ms HARTLAND — I want to go back to the issue of waiting lists for outpatient appointments. You were talking about how it needed to be clearer because it is almost like a two-tiered system at the moment, because you are on the waiting list to get on the outpatients waiting list. Can you talk a little bit about how that should be recorded so that it is actually measuring how long people are on a waiting list?

Prof. McNEIL — Yes. The rationale is easy enough because if it takes forever to get an appointment, then that really makes the idea of a waiting list a bit tricky, but I think there should be a record of the time — the date — when the person is actually referred to the clinic and then there is the date when the person is actually operated on. They are objective, simple things; there is no judgement involved. To me that is an easier way. If we took the 90th percentile of that distance, that is easily auditable, it is totally objective, people understand what it means, so I guess that is what I was referring to.

Ms HARTLAND — That makes sense.

Mr DAVIS — I want to pick up on Ms Hartland's point. It seems to me that that referral point is a critical point to begin the process of counting times and performance, and you would presumably want some objective measurement at an early point after that referral.

Prof. McNEIL — That is right.

Mr DAVIS — Some tests or instruments applied at that early point that would give you baseline measurements forward.

Prof. McNEIL — That is right, exactly.

Dr EVANS — Like time of first appointment would be an obvious one, so if you are referred in to have an operation, when do you get to see the surgeon who will then order the tests and prepare you for theatre, or decide perhaps that theatre is not appropriate.

Mr DAVIS — And the failure of the system currently to report on this outpatients group, as we might call it, for want of a word, where there are tens of thousands of people, where does that leave the measurement in the whole system overall?

Prof. McNEIL — I am fairly limited in what we would want to say about this area because our main focus is measuring quality, but I would say that our concern really is just with the urgency categories and the fact that they are so variable, and how it is actually done is, I guess, not something — —

Mr DAVIS — Something to be devised in each area?

Prof. McNEIL — Yes.

Mr DAVIS — To understand precisely your ideas, and picking up Mr Hall's point, you think there should be some sort of independent group. You made a point about the department. Is there sometimes potential for a conflict with the department being involved in that measurement? The department from time to time may have

an interest in ensuring that measurements are low, for example, in terms of waiting times because they have to be reported, so you might want to be one step removed in terms of independence.

Dr EVANS — Certainly the way registries are developed is that there is a steering committee that oversees the registry. It is usually comprised of clinicians and perhaps somebody from the funding body, so if it is the department, they should sit on that steering committee. A consumer rep would be appropriate as well. We see it as their role to look at the data and to assess the quality of the data. They would take advice from working groups perhaps along the way, but once the steering committee was happy that the data was reliable and good, then I see that perhaps the department in its clinical networks may potentially play a role in further reviewing the data with a thought to disseminating it.

Mr DAVIS — How do we control the integrity of the data? I would be interested in your reflections on this. We have had a problem in Victoria recently where there has been what appears to be frank manipulation of data. How do we control that sort of data, the misallocation of categories and so forth?

Prof. McNEIL — It is interesting, just following on from what Sue says, because most of the registries are not run by the DHS. They are run under contract, and certainly a number of them are run through Monash University, which is independent.

Mr DAVIS — So at arm's length?

Prof. McNEIL — It is at arm's length. We provide our reports and they are independent. There is no route to influence what we say really. In terms of the waiting list, that is administrative: it is done by the hospitals and DHS and then reported on. But my feeling is again that a lot of the problems that we got into with the hospital waiting lists were because of the lack of defined rules — too much judgement and too few rules.

Mr DAVIS — It allowed manipulation to occur?

Prof. McNEIL — That is right; it allows manipulation, and then you provide incentives. Again, it gets back to what we regard as epidemiologically unsound data — data which is not believed and is subject to manipulation because it is so misty.

Mr DAVIS — In your period on a board and another board now, what data was provided to you on these sorts of categories? Did you get a deeper level of data than what is publicly reported?

Prof. McNEIL — On waiting lists?

Mr DAVIS — Yes.

Prof. McNEIL — No. For waiting lists we get this sort of routine data which is published by DHS, but for someone like myself who understands and has spent a lifetime trying to measure things in health, we realise that the way it is being done leads to all sorts of difficulties in interpretation.

Mr DAVIS — And the quality assurance committee of the board? Most boards have, however designated, a committee of that nature. What do those committees do in terms of driving the improvement of data?

Prof. McNEIL — I think they are fairly limited at the moment because really there are two things. There is setting up the data system and then there is interpreting what you get given in front of you. In the ambulance service where I was on the board, we had the opportunity there to actually set up a data system and collect it, but there is no capacity to set up a data system in Victoria unless the state government or someone takes the initiative and then says, 'Right, we will have a data system which hereby measures cardiac procedures, for example'.

If we got that data to the committee, I think your deliberations would be very much better informed. I remember being on the quality committee of one of the major hospitals — this is another hospital I am not on the board of — when for the first time we saw the data from the renal registry. For the first time we could see that this particular hospital's performance in renal transplantation was better than the average. That was a wonderful revelation to us because it was the first time that we could say, 'Right, the clinical performance in a highly important and significant area here is good'. I cannot tell you really what a great moment that was. For most of the rest of the data it is, 'Yes, okay, but what does it mean?'.

Mr DAVIS — Can I finish on one point that you made quite early in your presentation, which was about the national hospital report that has recently been released and some of its comments about measurement and so forth? If I could put it this way, and I would be interested in your reflections, there is an interaction in a sense between a desire to have a national system pooling all of the data, and at the same time there is perhaps the less cumbersome size that we face in Victoria where we could, for example, lift durable measures from overseas. Do you have some reflections on that? Should the Victorian system and hospitals be looking to take international stuff and implement it even though it may be desirable to do something nationally, although that may take a longer period?

Prof. McNEIL — I think that Victoria is, for all the deficiencies here, still leading the way in Australia, and we have a wonderful opportunity to show leadership. Any person involved for a lifetime in hospitals would read that report and say, ‘Gee, all these recommendations about quality are terrific’. Those of us who work in this area are very well aware of what is going on overseas. Yes, I do think that many of those measures definitely are the way to go. Registries are being established in the UK, in Europe and so on, and there is no doubt that in the next 10 years they are going to be a much more recognised way of measuring hospital performance. But they will always be the top of the pyramid — the really important things, the ones where quality really makes a difference, everything from prostate cancer, stroke to heart disease where if you have bad quality, you are going to run into a lot of distressed people later and a lot of extra cost.

Dr EVANS — I think a lot of the indicators put forward in the national report are based on administrative data because it is readily accessible and it is cheap, but it has been shown time and again that the quality of that data is not good. For example, if you are looking at cancer and quality of care and even outcomes, the administrative data does not even collect staging of cancer. It really is farcical to think that you can measure quality of care when you do not know — —

Mr DAVIS — The severity of the condition.

Dr EVANS — — at what stage the patient is presenting to the hospital. It really is incredibly limited. But they have taken that perhaps politically because it is easy to measure, it is there. We would argue that it needs a lot of work if it is to have any kind of clinical credibility. It is reliant on what is documented in the record, and we know that is ad hoc at best.

Mr TEE — Thanks for your presentation. Just starting with the point about the referral point, I would like to get a bit of clarity. Does that mean the point at which you go to your GP and the GP writes a letter and you then ring up and make an appointment? I just want to make sure that is how it works.

Prof. McNEIL — That is right. Yes, that is how it works.

Mr TEE — So if you measure from the referral point through to the hospital admission, you might measure the efficiency of the hospital, which may not be a bad thing, but you might also measure how often people lose that letter or how often they put it in their bag and wait for a month or two months before they do anything. It might be a hospital efficiency measure you end up with but it might also be the more subjective figures where patients are getting used to the idea, as it were. Is that right?

Prof. McNEIL — Not really. The typical situation is that you go to your doctor. If he feels that you need a surgical appointment, he sends you to a surgeon who then gives you a referral letter to a hospital outpatients and then you ring up and make the appointment for the hospital outpatients. At that point when you contact the hospital seemed to me to be a very sensible, unambiguous go point. The day you have your operation is another simple and unambiguous endpoint. Some people will lose their letter or forget their appointment or whatever, and that is one of the reasons why we have suggested the 90th percentile — to get rid of the exceptions and the strange situations. I guess that was the logic to it.

Mr TEE — It might be that if there is a problem with people not ringing up or losing their letters, then it is something again that can be addressed.

Prof. McNEIL — Absolutely, or forgetting their appointment.

Mr TEE — Or forgetting their appointment. There can be measures you can take to pick that up.

Prof. McNEIL — Just to add on to that, when we did our research on waiting lists, particularly on the hip operations, we were really struck by the inadequate treatment of people on the waiting list. Often they are put on the waiting list and it is assumed that that is their treatment. But people who have got bad hip arthritis often can be a lot more comfortable in that waiting period if they are treated well medically: if they are given the right medicines and drugs. I am just telling you anecdotally but we did identify as part of our research project that the medical management of waiting list patients was pretty often inadequate.

Ms HARTLAND — My previous job was in an Office of Housing high-rise block for 90 older people and that was my experience at Western and Sunshine. Once you got them on the list that was a real victory but then in the 12 to 18 months they would wait for their hip replacement they were not well managed, especially for pain.

Prof. McNEIL — That is right, yes. People think that putting a person on a waiting list is the management but it is not.

Mr TEE — We collect data for various purposes. One might be the case mix system for how much money we should allocate out of the pool. There is patient satisfaction data that we collect and that might help. Am I right in saying that the thrust of your submission — and you are not necessarily critical of those — is to say, ‘We can do a better job in terms of collecting data which goes to patient care and patient outcomes. We are leading the country but we can focus better on that sort of data’. It is not so much you being critical of the other purposes for which we collect it — —

Prof. McNEIL — That is right.

Mr TEE — You are just saying that where we are collecting patient data, yes, we are leading the way but, yes, we can do better.

Prof. McNEIL — I think we have collected a lot of reasonable data on a lot of easy things such as the immunisation rate. It is very important; we have to collect that. But in the big hospitals we are spending a very large amount of money on some highly important and technical procedures. It is the peak of the pyramid thing really. We need to do a lot better at some of the fundamental things that hospitals do which take so much money, effort and resource.

Mr TEE — I am conscious of the time. You indicated a couple of times that we are leading the way nationally in a couple of areas. What are those areas? Where are we doing particularly well?

Prof. McNEIL — I think we are leading the way in the trauma registry. I think that is probably one of the best examples where Victoria has done really well. In cardiac surgery we have done really well; we have set up the first cardiac registry that covers the state, and now we are having hospitals from other states asking to join that registry. I think generally Victoria would be seen as leading this move.

Setting up registries is not just a matter of getting a data collection. It is an issue of how to deal with patients’ privacy, what the governance of the registry should be, who should be represented on the steering committee and what should be the policy for dealing with release of data. We have done a lot of thinking about that as well and published a report which is on the website of the national quality committee; it gives the guidelines for the establishment of clinical quality registries which have, I think, been tested around Australia.

Mr KAVANAGH — Professor McNeil and Dr Evans, thank you for your presentation today. You did mention the cost of doing studies, and you gave the example of a study into the efficacy of angioplasty at about \$40 per angioplasty procedure. What is that in terms of a percentage? How much is an angioplasty procedure?

Prof. McNEIL — I think it would be about 1 or 2 per cent.

Mr KAVANAGH — Do you think that is typical of those costs throughout the health industry?

Prof. McNEIL — Yes, but only for those relatively small number of high-significance areas. But, as I said, there is a bigger cost in not doing it, I think, in many of these things.

Mr KAVANAGH — Yes, I understand the point there. Mr Davis asked you a lot about this, but would you say in general that the motivation for extra funding can often distort the kind of health data you are getting through surveys and information provided by hospitals, for example?

Prof. McNEIL — Yes. I think that is the one of the reasons why we have been putting so much focus on epidemiologically sound data which does not require judgement, because if you are measuring something which is based on judgement and you are going to get a lot more money if you judge it this way rather than that way, then you are opening a can of worms. Whereas if on the other hand you have a very simple measure like the day the letter arrives for a booking in an outpatient department, that is virtually unable to be manipulated.

Mr KAVANAGH — In your experience, is that manipulation quite common in Victoria?

Prof. McNEIL — I could not say that to be honest. I really do not know. But I know from having spent a lot of time in this area that quality control of the data we get is fundamental across clinical and public health research.

The CHAIR — Professor McNeill and Dr Evans, the committee certainly appreciates your evidence here this morning, and your written submission as well; it has been very useful and very interesting for us to hear. We have run over time a bit but we do appreciate you being here. Can we get an electronic copy of your slide presentation?

Prof. McNEIL — Yes, certainly. I will also send you a copy of the presentation I gave to the ACHS. Can I just say in relation to Mr Kavanagh's comment about what percentage the data is, I will collect more detailed information and give it to you.

The CHAIR — That would be appreciated. We may have some other follow-up questions as the inquiry proceeds. We will have a draft transcript of the evidence sent to you in the next couple of days for any corrections you wish to make. We thank you for your evidence and attendance today.

Prof. McNEIL — If you are interested in visiting us at the Alfred hospital and seeing the registries, the data and the way it works, we would be delighted.

Witnesses withdrew.

