

2005 Chief Health Officer Seminar Series

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Directions for medicine and nursing in the ACT

Transcript:

I want to talk about the directions in medicine and health that we're experiencing in the middle of the first decade of the 21st century.

I'll start off with a simple analytical framework that I find quite helpful for larger scale reforms, and that is to look at the health system as it is comprised of three components of management, expertise and financing.

Then we'll look at two specific areas that are undergoing fairly rapid reform at the moment – information and communication technology in the health sector, and safety and quality. I particularly want to tie both of these into the context of the health gains that we're making. They do not involve just rearranging the deck chairs or doing the same old things in a 21st century way, they are actually making a serious impact on life expectancy and morbidity for our population.

The analytical framework that I find quite helpful for larger reforms in health is one that recognises that if you want to make a major change there needs to be coordinated action in the management of the health system or the service that you are wanting to change. There needs to be a corresponding shift in the expertise or mobilisation of the scientific evidence or the scientific expertise and, further, there needs to be a realignment of financing to recognise and often drive the reforms in the other areas.

Now I'm not going to be talking about financing very much. We have a number of seminars on financing, but today we'll be talking more about management and expertise. Just to put this in perspective, since World War II there's been a major shift into the public sector of health, driven in part by expectations from the public through the wars. There was a feeling of, well, what have we won? What gains are we going to get from this?

There was an expectation that health care would be better delivered, so throughout the OECD, people have called on their public sector governments to take a very strong interest in health care delivery across management, expertise and financing.

So how has that manifested itself? Firstly, management has been created in the democratic image so one person's electorate is another person's area health service. Politicians have had responsibility for health foisted on them or they've actually taken it up and created the health system in their own image. They represent electorates and that regionalisation in the democratic structures is now mirrored in a regionalisation of our health management structures, serving the whole population within that region.

Secondly, in the expertise field, the population health sciences have become pre-eminent. When I was a student, which is over 20 years ago now, professors tended to have two hats. They were excellent clinicians and they ran wet labs. They were laboratory scientists. They could look down microscopes, they could make things happen in test tubes and they had lots of rats in the laboratory or mice or cell cultures, that sort of thing.

These days the professorial appointments – and we're making quite a number in the ACT over the first decade of the 21st century – have population science expertise, they can all do large scale clinical trials. They may or may not have a wet lab. The older ones tend to. Paul Gatenby our Dean ran a wet lab. Frank Bowden, our new professor of medicine has a number of community-wide trials going. He's a population scientist and he operates on that frame.

On the financing side, one of the principal techniques of public sector financing is the use of the funding formula as opposed to the market pricing. In the private sector, pricing and individual transactions are the major technique. One of the interesting things about funding formulas is that you can make them fit to a region so you can have a regional funding formula. Further, you can put population health parameters into the formula so that if you have more indigenous people in your area you get more, or if you have more aged people, or if you have more births. So that's the way that funding is often done, through formulas that incorporate regionalisation and population measures.

These themes will recur later but for now let's turn to information and communication for health. We need to recognise where we are. The health sector spends about 2 per cent of its total expenditure on information and communication technology (ICT). That is well below the average for other technologically driven sectors of the economy. If it was in education, mining or in hospitality and tourism, it would be really more like 5 per cent – that's a fairly good ICT spend.

Why is the health sector lagging in the adoption of information and communication technology? I think one answer is that there is a lot of tradition in health. We have large institutions which are partially closed and which change only very slowly, so that's one problem. The second, paradoxically, is that the health sector has a very high level of functionality in information processing and in communication using traditional methods.

We have an excellent method of communicable disease notification based on faxes. It's simple. It's been set up for many years and it works very well. So if anyone wants to talk to us about getting with the modern world, we respond that we believe in what we're doing and sometimes question the fallibility of modern electronic systems. Is there sufficient robustness in these new systems for us? We already know the fax system is very robust.

It's a similar argument with clinical communication. People in the x-ray business are going to take a fair bit of convincing that your electronic delivery of a film of an x-ray on a video unit is going to be better than actually getting the plastic film and holding it up to the light.

We have a high level of functionality that makes people get quite concerned about adopting new technology. However, one of the things that marks the health sector is that when it does adopt new technology it does it fast and it does it very well.

When I first moved into the Commonwealth bureaucracy people would say to me, 'no offence to you, but your colleagues are just so conservative and it's so hard to change anything'. I replied that that's just not true. They're hard to convince, but look at the way they respond to clinical evidence. When the drug companies made statins available for the treatment of high cholesterol, doctors were quite sceptical. But once the evidence was in, and they saw them work, saw them produce health gains, the adoption of statins by the medical profession was unbelievably rapid. It took all of the bureaucrats by surprise, which meant their budgets blew out by factors of several times what the expectations were.

The same has happened with angioplasty. Angioplasty ten years ago was used on a very small percentage of patients. But as the techniques improved, and as the angioplasty proceduralists were able to demonstrate that they could actually make the gain for that patient's health and avoid an open heart procedure, the number of angioplasties done has risen astronomically quickly.

There are a number of other examples we could cite. The pattern in health, in which people are initially sceptical but become rapid adopters once you have tripped the switch that allows them to appreciate the evidence, is a pattern of rapid change. And once we decide to change, we do it very well.

I think that we're at that point now with information and communication technology for health. Patients and clinicians expect much better communication now than they did even ten years ago.

It is not enough for a patient to turn up in a specialist's surgery without their results or without the specialist being able to get ready access to the results. It's not good enough for them any more to come into hospital and find the admitting intern has to repeat all their tests because they haven't got them with them. The patients say 'I've told the doctor, I've had that test, can't you get the results?' Patients, and clinicians, now expect better service, having seen other aspects of society where there's very fast communication.

Chronic disease management requires much better information and continuity of information. Management of diabetes, for example, requires surveillance from diagnosis through to death. Good surveillance and monitoring should be used to adjust treatment and reduce the rate of progression of complications. That's the pattern for most chronic diseases - information will allow better management and better quality of life - but it's also the case for episodic hospital care for the patient being admitted for an operation.

One of the key changes here is the rise of day-of-surgery admission. In times gone by the idea was you came in a day or two or three before surgery and we'd sort you out and make sure everything was in order. These days we're aiming for three-quarters of our patients who are having surgery to come in on the day of admission. So everything needs to be sorted out in advance and communicated to the hospital and to the right parts of the hospital on the day of surgery because within two or three hours of hitting the hospital you're under anaesthetic and having a procedure.

Pressures from patients and from the business of what we are doing, combined with the availability of information and communication technology, are really driving a fully insulated clinical information and communication environment in the OECD. I was

privileged to have a look at some of the developments in the UK and the US earlier this year.

We too are developing national priorities for E-health. In Australia the governments of State, Territory and Commonwealth have joined together to form a company called NEHTA (National E-Health Transition Authority). Given the millions of dollars needed to drive the agenda across the whole of the country, these are the major areas in which they are introducing major technological development of their IPT:

- supply chain management,
- integration of communication standards between hospitals and other agencies, secure messaging and information transfer,
- consent models – privacy is a problem that needs to be solved. Patients can consent for an operation in one spot under a fairly rigorous process – and that's expected these days – but that needs to be communicated to the participants in the next part of the process.

And so it goes on with indexes and directories, health informatics industry reform, clinical data standards and so on.

According to the National E-Health Transition Authority standards, information technology will be provided by the IT industry to hospitals and other healthcare providers. That will allow full communication between all the different clinicians and units working within the health care system. From the patient's point of view it all ends up in an event summary of their health record. Incidentally, that health record itself need not ever be held comprehensively together in one single location.

Let's turn to safety and quality and try to understand the issues from the perspective of what health gain we are getting. We're all aware of a lot of changes and developments in safety and quality. Just to get an idea of what's driving that, a key idea to consider is that the public sector has assumed responsibility for the delivery of health. The reason that the public have asked the public sector to do that is because people don't know how or what to choose.

If I go to the doctor with a pain in my gut and he says 'You need to have your gall bladder taken out', and I say 'Really? That's not what I came here for. I was hoping you would say take two aspirin and lie down and it will go away'.

The point is, you don't know what you need for yourself. Health is dependent on expertise and for that reason the public are looking for governance, for doctors to take an interest and make sure that they get the things right. That makes quality and safety of care sit centre stage on the public sector manager's agenda.

For the public sector, management of health makes the delivery of quality and safe health care a top priority for consumers. Traditionally hospital managers took very little interest in clinical outcomes for the quality of care, but these days they are at the top of a manager's performance agreement. It's reflected in their management structures, of what we're calling the clinical governance agenda, and of the structures for clinical governance, that we have in the ACT.

One of the reasons why change has happened so slowly with this is because it's been very hard to capture the information about the quality and the safety of care and clinical information. But communication technology developments that are happening now are

finally allowing managers to see the quality and the safety of the operations that they are managing. Once visibility of this is achieved there will be a lot more gains to come.

The gains in population health outcomes from safety and quality will come from some specific sources. One is better case-finding of people who are at risk, such as people with Type II diabetes. The Australian estimates four years ago were that 50 per cent of people with Type II diabetes in Australia had not been diagnosed. We've reviewed that in the ACT and we believe now that we have diagnosed about 80 per cent of them. So if you can find these people you can then offer them care earlier and stop their complications developing. And secondly, once they've been found we can also monitor their needs. So if people have diabetes and we're following them we can check, for example, how their blood sugar control is going. We've got some simple tests to assess that over the course of the year. How is their retina going? Are they at risk of going blind? So that's the first one - better case finding and better monitoring of people's needs.

Secondly, we need to deliver the right care to the right patients every time. We have the technology and we have the clinicians to deliver really good care for a very wide range of conditions. But at Calvary Hospital, for example, they found that only one-third of patients presenting with a myocardial infarction were getting the right treatment, which is blood thinners, within two hours of arrival. Only one-third. So they did a quality project that lifted that up to 93 per cent and they're now one of the country's leaders in the best practice care for people presenting with myocardial infarction. It's made a huge difference in terms of lives saved and in morbidity avoided for those people and there's no change in technology. The only change is that the right care is being provided to the right patients every time now. Calvary has become somewhat of a benchmark for that across the country. The Canberra Hospital does very well on those indicators too. We're talking about medication management.

We're talking about accurately targeted procedures and better medication management and the right procedure for the right patient that reduces adverse events and enhances health outcomes.

How does this look on the epidemiology? We're just updating the last Chief Health Officer's report and from it I can tell you that of the total deaths in the ACT for the period 2000 about 25 per cent are avoidable. Within that 25 per cent, we can avoid one third of the cardiovascular deaths. We can also avoid maybe one fifth of the cancer deaths that we are seeing and a smaller number of respiratory deaths. Many of the remaining preventable deaths come from accidents and injuries. These areas are where we can find the gains. This is very real stuff.

Let's also look at life expectancy at birth for women and men from 1971 to 2001. Life expectancy for men in 1971 was about 68 years. That wasn't very long ago. Now it's about 78 years. I remember in the early 1990s being up to my neck in health policy. I had no idea that we were supposed to be delivering improvements in life expectancy. I thought we'd got all those. Now I look at the gains and say to myself: 'Well, what are we going to do over this decade to continue to deliver those gains in life expectancy'?

Improving infant mortality is another way. Gains in infant mortality have been dramatic and place us as one of the best jurisdictions in the entire world. Again, look at the trend. We've got to keep delivering on this – because we can.

We must also look at the death rates, the flip side of the picture. This is really what we're working on - just really pushing down the death rates for men and women. The trend is downwards but can we continue it? Practically I think the public's health can continue to improve. The public system is expected to deliver and is acquiring the techniques and the governance, the clinical governance, to actually focus on the delivery of more health gains for the population.

It's population science techniques that we use to monitor this and to help direct the effort into exactly where it's needed. We haven't invented a new mode of treatment. For example, the great majority of the people presenting at Calvary Hospital with myocardial infarction were given life saving blood thinners within two hours of arrival. That outcome comes thanks to quality systems, through better clinical governance.

Why am I optimistic that these trends will continue? I think the information and communication technology for health that's been implemented from the early nineties right through to now - implemented in a very profound way - will accelerate those gains over the next decade. So even though there may be a little less health gain to extract, I think we'll get it all over the next decade.

This is the challenge facing the health system at the moment; making those trends continue so that in 2015 we can stand here and we can say 'what a decade it's been'.

Thank you.