

**REPORT OF PROCEEDINGS BEFORE**

**GENERAL PURPOSE STANDING COMMITTEE No. 2**

**INQUIRY INTO QUALITY OF CARE FOR PUBLIC PATIENTS AND  
VALUE FOR MONEY IN MAJOR NON-METROPOLITAN  
HOSPITALS THROUGHOUT NEW SOUTH WALES**

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**At Sydney on Monday 27 August 2001**

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**The Committee met at 1.30 p.m.**

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**PRESENT**

The Hon. Dr B. P. V. Pezzutti (Chair)

The Hon. Dr A. Chesterfield-Evans

The Hon. R. D. Dyer

The Hon. D. F. Moppett

The Hon. H. S. Tsang

**MICHAEL ANTHONY REID**, Director-General, New South Wales Health, 73 Miller Street, North Sydney, and

**PAUL KENNETH TRIDGELL**, Deputy Chief Information Officer, New South Wales Health, 73 Miller Street, North Sydney, sworn and examined:

**CHAIR:** I advise the media and members of the public that under Standing Order 252 of the Legislative Council evidence before the Committee and any documents presented to the Committee that have not yet been tabled to the Parliament may not, except with the express permission of the Committee, be disclosed or published by any member of such Committee or by any other person. Copies of guidelines governing broadcasting of the proceedings are available from the Committee staff.

Mr Reid, in what capacity do you appear before this Committee?

**Mr REID:** As Director-General of New South Wales Health.

**CHAIR:** Are you conversant with the terms of reference of this inquiry?

**Mr REID:** I am.

**CHAIR:** Dr Tridgell, in what capacity do you appear before this Committee?

**Dr TRIDGELL:** As Deputy Chief Information Officer, New South Wales Health.

**CHAIR:** Are you conversant with the terms of reference of this inquiry?

**Dr TRIDGELL:** I am.

**CHAIR:** If either of you should consider at any stage during your evidence that in the public interest certain evidence or documents you may wish to present to the Committee should be heard or seen only by the Committee, the Committee would be willing to accede to your request. However, decisions taken in committee can be overridden by the Parliament, and I understand that that is a new ruling.

**Mr REID:** Would you explain that, please?

**CHAIR:** It is a confidentiality clause, but we should not face that problem today.

**Mr REID:** I would like to know what that means.

**CHAIR:** Although the Committee may take certain steps to protect the confidentiality of the evidence given before it in committee—in other words, with the public and media excluded—the Parliament can override that decision. That would be a decision of the Parliament rather than of the members of the Committee; the Parliament would make that determination.

The Director-General will give some introductory statements, because this information is new. The Director-General mentioned the information in his earlier brief, and he will put the information in context. Today, Dr Tridgell will give a major presentation on the new methods for measuring quality and guidelines for improving quality and value for money. The Committee will then ask a few questions.

**Mr REID:** At the last presentation before the Committee, we spoke at some length about the Government's action plan and the initiatives within New South Wales Health. To summarise, the two reports that were commissioned in 1999 and which came out in early 2000 were the John Menadue New South Wales Health Council report, and the Ian Sinclair report on smaller country towns. The reports focused on budget uncertainty and perceptions of inequity, and poor winter management, particularly during 1999 although it had occurred in previous years.

The reports addressed rural budgets, budget overruns, and both reports identified clinicians are not as involved in the health system as they ought be. Consumers were concerned about the extent to which they had participated and that their part in making decisions on health could be improved. The reports identified that the system was performing well, notwithstanding that many people in the process say that there are real major problems.

The two independent reports highlighted the increased demand upon the health system in both New South Wales and nationally, as well as the costs associated with that increased demand.

At the last Committee hearing I said that that increased demand was not just about the ageing of the population or the growth of the population—and this is relevant to Paul's presentation. Last time I indicated that the combination of those two factors probably contributed only 20 per cent to demand increases. The major increase in demand of health services internationally is the application of technology, more the low-cost, high-volume technology, particularly things ending with "scope".

The findings were that the annual budget process—that is, occurring recurrently each year—are limited to planning and that there is a need for more clinician involvement and leadership. Today I will talk about the need for improvement in the quality of care. The report found the need for better co-ordination of chronic and complex care, that is the very high-cost sector of our health system, how we promote innovation and how we have better involved and better informed consumers.

You will recall this is the way we have set up the implementation process. We have the two reports that came before us early in 2000. We have set up a very comprehensive implementation process involving large numbers of doctors, nurses, allied health workers, consumers, health managers and, indeed, some outside independent people in the process. Today we are focusing on the work of the acute care group, which has been chaired by, I think it is fair to say, Australia's leading cardio-thoracic surgeon, Brian McCaughan, chairman of the Medical Board, a very highly regarded clinician, and Anna Thornton, who is a nurse and who is now the Director of Nursing at Prince of Wales Hospital. It is their work that has led to a lot of the quality activities.

**CHAIR:** Paul's presentation will be only about acute care?

**Mr REID:** Yes. When you heard the presentation it was around the acute care area. The role of that was how we make the acute care sector better. We have looked at a range of other things around this acute care committee, particularly around how we have increased day-of-surgery admissions, which has increased dramatically from around 60 per cent-odd to around 80 per cent, which is our target, our day-only admissions and the fact that every person discharged will have a discharge summary, as we are now implementing. We are looking at variations in clinical practice, which is the particular work that Paul has worked on.

The quality issues that Paul will discuss probably kicked off in a big way in Australia from Professor Bruce Barraclough's report as chair of the Australian health care quality study, which was reported in the *Medical Journal of Australia* in mid 1995. It took many years before we reached the implementation phase, but there is now nationally a committee set up, once again chaired by Bruce, to look at how we improve quality generally through our health care system. That study back in 1995 looked at more than 14,000 admissions at a selected number of hospitals in New South Wales and South Australia and found that something like 16 per cent of people who enter our hospital system suffered an adverse event. That is public and private hospitals. An adverse event is defined as an injury or complication caused by health care and not by the patient's disease. That was the issue there.

Of that 16 per cent who had an adverse event, 49 per cent of those resulted in a temporary disability, 27 per cent in a permanent disability, and the very well recorded data from around that time was that about 6.7 per cent had an outcome of death. More significantly, of those numbers, of that 16 per cent, something like 51 per cent, more than half of those adverse events out of the survey, were deemed to be preventable. This is not an unusual finding. This study has been replicated more or less with similar results in a number of western countries throughout the world. It shows that with appropriate management and appropriate clinical protocols, appropriate support mechanisms for people who work in our hospital systems, a significant number of adverse events are preventable and we should endeavour to do all in our power to do that.

If we extrapolated those findings to the whole of the Australian health care system, 3.3 million extra bed days would be required to treat the problem caused by health care management. That is a very significant factor for how our system manages itself. At the end of the day many of those preventable deaths, whatever system is put in place, will not be prevented but there is certainly enormous room for improvement nationally and internationally and how we go about that.

**CHAIR:** You saw the results published last week by Hilmer?

**Mr REID:** Yes.

**CHAIR:** That 66 deaths that may have been prevented in three hospitals, St George, Liverpool and Illawarra, given the number of admissions they have, and so on, are they still consistent or about the same level as that 6.7 per cent?

**Mr REID:** They are consistent but a subset.

**CHAIR:** I know they are a subset, but are they consistent?

**Mr REID:** They are roughly consistent.

**CHAIR:** Are they less or better or no change?

**Mr REID:** I do not know the actual details. My recollection is they are roughly consistent with the finding here. That was back in the 1990s. There was enormous media around that at the time. We now have the safety and quality in Australian health care task force, a national committee which has a budget of \$50 million, which has been contributed to by all States and Territories of Australia, chaired by Professor Bruce Barraclough from New South Wales. That task force has led on to a national advisory group in quality in health care, and we have replicated that in New South Wales. Dr Ross Wilson chairs the New South Wales Ministerial Advisory Committee on Quality in Health Care, and that committee has been evolving the policy framework in New South Wales by which we can start to address some of these quality issues and which Paul Tridgell's work will be reported to.

One other thing we have just established in New South Wales and which is very exciting is an Institute of Clinical Excellence. Bruce Barraclough has accepted the role of chairing that as well as his role on the national committee. It will be in this institute where the education of clinicians will take place—I am talking broadly of all types of clinicians, doctors, nurses, allied health workers—in how to improve their quality, in how to effect changes within their workplaces once they are identified.

**CHAIR:** How many dollars are involved in that?

**Mr REID:** \$5 million is involved in that, of which \$2.5 million will go directly to the institute for employing a core number of staff, probably three or four, and the rest will go to contract work. About \$2.5 million will reside within the area health services by which they will buy services from the institute.

**CHAIR:** Could the budget be vastly higher than \$5 million?

**Mr REID:** Depending upon other work it generates, it could be higher than \$5 million, that is correct. We have put aside a core budget of \$5 million. The work that Brent James has done in Utah in America, which a number of committee members would be aware of, will form the basis of a lot of this work on how the institute operates.

**CHAIR:** It is not modelled after the British NICE?

**Mr REID:** Absolutely, except the British NICE is not quite as oriented to practical training of doctors as this one is. The sole role of this will be in terms of clinician development and training.

**CHAIR:** The British one has absolutely no feedback loop at all. You have a feedback loop.

**Mr REID:** We will have three things operating now. The ministerial advisory committee, chaired by Ross Wilson, will set the policy; the Institute of Clinical Excellence will do the training; and, as you will see from Paul, the department will generate the data, which will be incorporated into performance agreements with the area health services, about improvements in quality over time amongst clinicians and feedback to doctors of their variations in clinical practice.

**CHAIR:** The Institute of Clinical Excellence will not investigate abnormal events?

**Mr REID:** No.

**CHAIR:** So it is really on the performance criteria.

**Mr REID:** It is on the education and training we can provide to our clinicians and work force to help them maintain and improve their quality. As to the activity of the New South Wales Council, Ross Wilson's

committee commenced work in October 96 and developed the framework for the policy agenda around clinical care in New South Wales. When that committee reported, the framework was endorsed for implementation in January 1999. It consisted of a committee structure and reporting frame, but most of all a performance frame. You have seen the quality framework document. I do not know if all members of the committee have that. That is the basis of the discussion today. It was provided to all members of the committee. If you do not have that we can provide it again. This framework is now mandated across all rural and metropolitan areas. The structure is shown diagrammatically on the slide. The various principles are set out within our document. Within the areas there are structures as to how the quality committees operate. They must adhere to a reporting frame on quality and a performance frame. This relates more to their performance agreement and how we evolve on quality.

**CHAIR:** Does that apply to Port Macquarie as well?

**Mr REID:** This applies to all area health services and, as you know, as a result of the four-point plan Port Macquarie will be considered and treated the same as any other base hospital. It will be required to report against this quality framework. The framework focuses on the core business of the area health services about clinical care, the accountability for quality of health care and various principles for managing quality care of the health services. It is aimed at the area health services and the hospital level. As you asked earlier, it is relevant to all areas throughout the State. It has an organisational focus because it indicates that there must be quality committees. This is the nature of the committees, this is the type of work the committees do, this is how the committees get the feedback and the loops between the clinicians and the health service. It is absolutely fundamentally underpinned by the essential role performed by health care professionals in quality improvement.

The framework describes an infrastructure to facilitate the statewide co-ordination, monitoring, evaluation, reporting and feedback on quality and it builds on and supports local health services quality processes. It establishes a means by which lessons that are learnt can be shared with other parts of the health system—something we have done poorly in the past. As you are aware, it is a key component of our government action plan for health, which is all about improving the dimensions of the quality of care that we provide. It is a stable framework for ongoing development and maturing of quality indicators and processes. Very importantly, it recognises the cultural requirement of continual quality improvement. The buy-in to this has been variable over time. It is gradually building up among clinicians. As one would expect, some parts of the State, some individual doctors and some individual nurses have bought in to this far more quickly. We are moving on much more quickly now. It is built upon a set of principles that see the health consumer as the primary focus of any model of health care quality.

This is an extremely important point given the findings of Bristol when the board of the hospital was held accountable for the clinical practice of the clinicians within the hospital. The area health service boards through this quality framework have a role in accepting responsibility for the quality of health care provided to consumers within their area. That is a simple statement, but it is an extraordinarily complex statement because that is where the balance lies: What is the responsibility of an individual clinician in providing quality care and what is the responsibility of the system, the area health service, in supporting or encouraging that? That can take place through employment of doctors, accreditation processes, credentialling processes, how we provide role delineations for hospitals so that clinicians, notwithstanding their competence, do not practice outside the capacity of the hospital to provide various health services, and the support mechanisms we provide to doctors and nurses in their day-to-day activity.

**CHAIR:** In the old days the area health service by-laws required hospitals to provide adequate facilities and doctors and nurses had to provide highest level.

**Mr REID:** Yes.

**CHAIR:** Has that changed? Does the hospital now have to provide the highest level as well as the doctors and nurses?

**Mr REID:** Absolutely. The focus has placed accountability on an area health board in a clinical governance sense to provide the capacity to doctors to provide their service.

**CHAIR:** You are talking about there being no longer adequate—

**Mr REID:** I do not know the actual words in the framework but it emphasises the quality of the system which supports the practitioners as equally important as the quality of the clinicians in their practice.

**The Hon. RON DYER:** I do not understand how you separate the professional responsibility of an individual practitioner in carrying out his or her practice in a public hospital environment on the one hand and the duty of the governing body of the hospital on the other to provide, shall we say, safe clinical practice. How do you separate the two issues?

**Mr REID:** It is a difficult one. I said at the start this is a very complex set of events. Individual clinicians within the system have to take responsibility for their own standard of care and treatment and for maintaining their skill base to continue to provide that care. They as individuals are not responsible for the system around them. That is the board's system. If we take a clinician who is practising a range of surgical procedures, then it is the responsibility of the board, assuming that the clinician is performing within his or her competence and is not doing things for which the hospital does not have a role. There are two issues here. Notwithstanding his own capacity, a doctor has to recognise what the system enables him to do—such as, the quality of the nurses, the quality of the operating theatres, whatever it might be. The doctor's responsibility is around his or her own clinical competence and maintaining that clinical competence. The role of the system and hence the accountability of the board is about the provision of operating theatres, nurses, the skills of the nurses, the correct role delineation, the correct after care, all those types of things which go with that aspect of clinical care.

**CHAIR:** You are basically saying you do not just rely on the quality of the doctor, whether the doctor is doing a good job, it is whether the area health service overall has a responsibility to make sure that he or she is doing a good job. It is both.

**The Hon. RON DYER:** I want to understand this from a legal liability point of view. Suppose an untoward event happens to a patient within a hospital and suppose further that the patient sues the clinician arising out of the adverse event. Are you saying that if the circumstances were appropriate the doctor would join the hospital as a third party?

**Mr REID:** Counter-claim, absolutely, and it happens internationally not infrequently.

**CHAIR:** It happens all the time. They usually sue both. The doctor is not covered vicariously by the hospital and has to still have his own protection if he is a contractor.

**Mr REID:** That is right. We are talking about two different classes of doctors. If you are an external visiting medical officer, an external contractor, not an employee, then you may join in claiming against the system. A salary person working within the hospital, be it a doctor or nurse, is covered anyway through his or her own indemnity which is covered by the State.

**CHAIR:** They are not separable.

**Mr REID:** In that circumstances it is not separable. There are probably more books around this room on those aspects of health care. It is an extraordinarily complex issue of where that separation takes place: the individual responsibilities and accountabilities versus the system's.

**CHAIR:** The issue I was referring to is a bit different, that is, to what extent the hospital has to provide the highest quality of infrastructure around the physician or the surgeon—in other words, whether the ear, nose and throat equipment is up-to-date and working versus whether the surgeons has to maintain his skills and training and his ability to operate with the equipment. That was the separation I was making. The Hon. Ron Dyer made a slightly different separation. Does the hospital have to provide equipment that is up-to-date and working and according to the role delineation and so on?

**Mr REID:** Otherwise its role delineation should not be designated at that level.

**CHAIR:** Quite right, Director-General, but it is not necessarily always the case.

**Mr REID:** They are the principles. A range of other principles are around consumers, but in the interests of time I will move on. Quality is about doing the right thing in the right way at the right time—and doing it the first time, not only at the right time. I could probably add it is about doing it properly to the right patient, to the right limb and those types of things. We are trying to find out what is the right way—because there is an enormous variation in individual clinicians' beliefs about the right way—and then endeavouring to ensure that clinicians agree that this is the right way. When we talk about clinical protocols and clinical pathways, it is very much about what is the right way and getting some commonality of agreement. Paul will show some of these. We are making a concerted effort in trying to identify indicator performers in each of these dimensional and cross-dimensional issues.

As to the committee structure of the board in every area, essentially every area health service is now required to have a peak clinical quality council. That has only occurred over the last 18 months as a requirement. Now every area health service in the State has a peak clinical quality council. Committees in each of the health services manage the quality of clinical care within the area. This slide shows where the quality council sits. The quality council has a direct responsibility to the board. The reporting frame has now been mandated for every area health service. As you can see, it provides mechanisms for how reporting takes place. Regardless of the nature of the health service—perhaps acute care or chronic care, depending on how the areas divide up their health services—this slide shows the reporting framework to the quality council. Equally important is the interface between the divisions of general practitioners and the quality council—because GPs are outside our system in New South Wales Health—and the role of consumer groups. That is now a requirement of each area health service in the State.

Its reporting frame, which the Chair made a good point about earlier, is both up and down. There is a feedback loop in this. It is the reports from facilities to the quality council, and it goes from the quality council to the area board. It goes from the quality council into the department, where it is required for commonality data sets. It goes from the area board to consumers. We feed back the type of information the board is presenting to the area quality councils, and the area quality councils feed down to the appropriate individual clinicians or groups of clinicians.

We are trying to emphasise—and I hope this will stand the test of time—in a bureaucracy that reports are written to improve patient care, not just for the sake of reporting, but we will see how that pans out. Coming back to the issue that the Hon. Ron Dyer mentioned, there is a separation between corporate governance activities and clinical governance. Corporate governance is the way in which an organisation operates under the control of a board, supported by senior management, and clinical governance is the framework through which health organisations are accountable for continuously improving the quality of their services and safeguarding higher standards of care by creating an environment in which the excellence of clinical care will flourish. This is the one which we have been endeavouring to focus on a lot more over the past period of time. We have had good developments around corporate governance but it is around the clinical governance that we have been more emphasising.

**The Hon. RON DYER:** Is clinical governance and corporate governance delivered by the one structure?

**Mr REID:** By the board, years. You have a board that is responsible in a clinical sense and in a corporate sense. If you take the history, six or seven years ago a board focused on the finances, and now it is focusing more broadly on corporate governance activities and now of recent years trying to expand that even more into its emphasis around clinical governance. As I say, a lot of that has been driven internationally through the experiences in the United Kingdom, particularly the Bristol case.

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** Is the Bristol case where the anaesthetist tried to stop the cardiac surgery in the paediatric unit?

**Mr REID:** Yes.

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** Presumably your boards are well clear of the clinicians in the area. How do you get the clinicians out of those clinical quality councils and yet have clinical expertise to look at what is happening?

**Mr REID:** The clinicians are not entirely out of the clinical quality councils, but the board is made up almost exclusively of people who are non-clinicians who have representation or other skills within an area health service.

**The Hon. RON DYER:** That being the case, how do they get on top of the clinical issues?

**Mr REID:** They have a combination of clinicians on them. They bring clinicians into their meetings to report. If you went to any area health service board in the State there would be various people of different clinical persuasions—doctors, nurses, including a staff elected representative and member—on that board structure. It harks back to another point. I think it has been a mistake in the past to assume that the issues around clinical governance solely rest with clinicians. The issues around clinical governance rest with me, New South Wales Health, area health boards, and with the Minister at the end of the day. The whole focus on clinical governance has been trying to get a delicate balance between how you get the skill base of the clinical input but still have someone who must take some accountabilities for the clinical practices which occur within the area health service.

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** Who is responsible for the generation of data? My experience in this is threefold. Mostly, if it is a big mistake it is hugely a system failure and often a communication failure within a system. But if there is an individual who is hopeless, that will set the norm of that hospital and in fact it will not be picked up or at least would not have been picked up and the reporting framework was by the registrars who do not offend their bosses so there were quite a lot of issues in terms of how the information was collected and got into the system.

**Dr TRIDGELL:** We are now screening data at the clinician level across the State on a number of performance indicators exactly to pick up those in outlying areas. It is very difficult for one, two or three clinicians within a department to know the reference points of their practice with the rest of the practice and the rest of the State. We are now starting to provide much more information on what that practice is like in the rest of the State so those in an outlying area can ask questions.

**CHAIR:** So boards are now able to get advice from outside about what is a standard, but the boards also now have a responsibility more to get advice—

**Mr REID:** Absolutely.

**CHAIR:** —that the standard that is applying in their own area is consistent with the standard across the State or, in fact, international best practice. I understand what you said that the Minister is responsible at the end of the day. I have to say that the Minister does an awful lot of finger pointing, rather than taking that responsibility.

**Mr REID:** Naturally, I would not agree with that.

**The Hon. RON DYER:** The Chairman is doing a little verbal on the end.

**CHAIR:** I am saying that it is my own comment.

**The Hon. RON DYER:** I hope it is.

**CHAIR:** It is. Canterbury was a good example of a system failure. I think the Director-General would agree with that. That was a system failure.

**Mr REID:** I would not like to comment in the context of your earlier statement. I think you might link that to other things, whatever I might say. I will move onto the implementation strategy. The framework has undergone a formal implementation strategy which involves the various initiatives at the State, area health service, clinical and board levels. We have had seminars, identification of quality care performance indicators, establishment of the quality councils, establishment of the full reporting networks. At the clinical level—which has been the much more interesting one, because it is the exciting one—we have had workshops, particularly around risk management initiatives in rural and metropolitan areas. We have developed a clinicians tool kit, which you would be aware of. If you do not have it, I will provide it to you.

**CHAIR:** I do not think everyone has that. It is worthwhile.

**Mr REID:** We will provide that. There is a range of other resource implications. We have had considerable education of board level around its education training. What support initiatives do that? I mentioned the institute of clinical excellence. I have mentioned the quality branch, with which Paul does a lot of work—it is the one that puts those indicators together at a statewide level and provides advice as to what is happening statewide—the development of quality of care indicators, which you will hear about from Paul, a clinical practice improvement program, much of which will take place through the institute of clinical effectiveness, and the human factors and error in medicine course. This has been absolutely fascinating because John Cardinal from the children's hospital, who is the son of Tim Cardinal, who was a famous clinician in New South Wales Health for many years, has been running a human factors and errors in medicine course.

John has been running programs using airline pilots and how they train airline pilots. They have this very interesting video which the Committee might wish to view at some stage—it goes for only about four or five minutes. It is not for real but you end up sweating through the process showing a plane coming in to land. You see the pilot bringing the plane in start to make a series of minor errors in the process but the rest of the team—and this shows the importance of clinical practice within a team, particularly in a surgical setting—are reticent to correct his errors. Each error builds upon another error and then it becomes a gravity of what occurs as a result of those errors.

They use something outside the health field through this process to demonstrate exactly the same processes that might take place in an operating theatre where a very powerful clinician or surgeon might start to indicate a course of events where other people are assisting him or her, the registrars, the residents, the interns, the nurses, whoever is in that room who have a role as part of that team. It very much emphasises team work and the fact that at any point in time people have a right and responsibility to make a comment about the practice that occurs. It is a very interesting video. That has been very well received by health clinicians because it is non-threatening to them. It demonstrates that the quality framework we are trying to apply in health applies equally to a range of other scenarios.

**The Hon. RON DYER:** Am I correct in assuming that that is a departure from what you might term a traditional medical model?

**Mr REID:** Historically, yes. Without in any way pointing to individual clinicians who have worked as teams for many, many years, I think we are trying to embed it far more within the system in terms of how to respond to errors within operating theatres. That is a responsibility for everyone, including the charge nurse and whoever it might be. It is the responsibility of the senior clinician who is operating within that environment to accept that advice and either decide that he or she has spoken in error or is making a contribution.

**The Hon. RON DYER:** Are surgeons accepting that protocol?

**Mr REID:** Yes. This is part of the reason that we have the institute going and of course why we are doing this. I believe there is a far greater acceptance of this now than there was 10 or 20 years ago.

**CHAIR:** I think that is true.

**Mr REID:** I just mentioned the quality workshops. That is where the chair came across Dr Tridgell doing a quality workshop up in the northern rivers in his clinical hat. As I said, there are a range of things which we have developed, including the tool kit and a guide for health care professionals around the indicators and variations. I will hand over to Paul now who will talk about the opportunities and pitfalls, where we are up to now and the progress in individual projects.

**Dr TRIDGELL:** If you go to the National Health Service [NHS] web site you will find graphs like this are available. These are showing mortality rates, in this case, by surgery or hospital. It is one of the responses that the United Kingdom has had to the Bristol events. I shall spend a minute or two on Bristol as it has come up to date. There were a number of events which were well above what you would expect at a hospital in a very specific type of cardiac procedure. If you looked at a hospital level or the whole cardiac unit or between hospitals, there is not a statistically significant difference. You need to go down to quite a specific level at Bristol to get some variation which can show there was a statistical variation of increased deaths.

**CHAIR:** Can you explain that slide, because I think it is important?

**Dr TRIDGELL:** It is different hospital types and this is showing deaths within 30 days of people coming into hospital. One of the problems which I see with this type of reporting is that lots of hospitals deal with different types of patients. Just saying surgery and putting them on a league table like this, you do not appreciate the slightly different roles and case mix which are behind the different hospitals. It can produce a lot of finger pointing between the community and the hospital where maybe there are very good reasons that the mortality rates are slightly different between the different hospitals. It takes a fair bit of expertise to drill down further into the data to understand whether this variation is significant or an abnormal variation, or whether it is well within the bounds of normal current clinical practice.

**CHAIR:** Even with a huge variation like that, this can be high-quality, everything?

**Dr TRIDGELL:** Everyone can be doing high quality at all of these sites, yet you can get graphs which show a lot of variation because they can be seen—

**Mr REID:** It is a slide to show that what we are doing in New South Wales exceeds that of the NHS because presenting data like this can raise more questions and cause more confusion than the drilled down data.

**Dr TRIDGELL:** I think it causes more confusion. I would not advocate putting up information. Information like this does not, in my view, add to the debate because it is so broad and general.

**The Hon. DOUG MOPPETT:** What sort of scale are we dealing with there? There are some lines there. Obviously Guy's and St Thomas' is very good by the look of it and Royal Suffolk has got a dot far out to the right. What does that mean?

**Dr TRIDGELL:** You cannot say that on some sites you have almost no deaths because there may have been deaths in a day-only unit whereas there should have been absolutely none, or you could have a lot of deaths in very high-risk surgical procedures. I do not think that these dots show better or worse practice when you have got such a generic label as elective surgery. What I will show you is that you actually have to have a lot of understanding of the coding and a lot of understanding of like with like to be able to interpret this type of information.

**The Hon. DOUG MOPPETT:** But all the same, having put up the diagram, just in rough terms, what do the first, second, third and fourth lines indicate in terms of increments of adverse events?

**Dr TRIDGELL:** Of the death rates?

**The Hon. DOUG MOPPETT:** Yes.

**Dr TRIDGELL:** I have to look at it.

**CHAIR:** You cannot see the bottom of the slide.

**The Hon. DOUG MOPPETT:** That is what I am saying.

**Dr TRIDGELL:** It is available on the NHS web site so it is easy to look up.

**The Hon. DOUG MOPPETT:** I will have a look at it.

**The Hon. RON DYER:** What does a hospital governing body do in the light of statistics? Does it rely on clinical advice or some other sort of advice to protect itself?

**Dr TRIDGELL:** For the statistics?

**The Hon. RON DYER:** You are saying that you cannot necessarily draw conclusions from the raw statistics.

**Dr TRIDGELL:** Yes. As I move through my presentation, I will show you how, for some procedures, we are actually looking at some very specific procedure coding. If we look at how we classify patients who are inpatients, there is one classification system which is based on diagnostic related groups [DRGs] which put people in buckets. There are about 655 DRGs in version 4.1. Even if you look within those buckets, those buckets can be very broad. I will show you some examples where, within those broad buckets, there can actually be many procedures which are quite distinct and which have quite different profiles in length of stay and quite different profiles in terms of mortality and infection rates. If you just publish information on a hospitals or DRG basis and do not appreciate these nuances, you can readily draw a false conclusion.

**CHAIR:** The cartoon has us amused. What are the words?

**Mr REID:** "We must put an end to this blame culture."

**CHAIR:** And what is the name on the back of the T-shirt?

**Mr REID:** One is the Health Minister and the other one is the doctor.

**The Hon. HENRY TSANG:** In this case, it is Hon. Dr Brian Pezzutti and the other person is the director-general.

**Mr REID:** This is a Federal slide.

**CHAIR:** That is exactly what happens in Britain. It is a British cartoon, is it not?

**Dr TRIDGELL:** Yes, it is a British cartoon from the British Medical Journal [BMJ] which has put information on the web site. The response has been very much a blame culture and that is directed often to

individual clinicians. One of the responses to this was that the NHS and the professional bodies sat down a few months ago and came up with over seven pages. Included in those pages is an agreement that: the culture needs to be open and participative; learning and evaluation need to be prominent; safety of patients is paramount; it is a larger complex system and things will sometimes go wrong; and we need to respond, not by blame and retribution, but by learning and understanding the processes that led to the events that happened. That is just a little bit of scene setting of the NHS because it has impacted on both ourselves in New South Wales and on other countries internationally.

Some other types of indicators that we are looking at are indicators that we have captured within current information systems and there are other indicators that are actively being developed. We are getting the clinicians together with some of the groups, as occurred with the Government action plan particularly in the chronic care area where a large group of cardiologists was brought together. They sat down and thought about some of the quality indicators that should be used. If you look in both the UK and the US, for example, at the use of ace inhibitors or the use of aspirin on people who have ischaemic heart disease, there is good evidence in the literature about high rates of use of this medication.

When I visit some of the areas, I find that locally within departments this information is captured which is based around evidence-based practice. There is some that is collected on a broader scale, such as the time for thrombosis for a couple of clinicians, which is also used on the NHS and in the US. When looking at care plan development, again we are getting clinicians together and asking them why their practices are different. The department is playing a facilitative role to share information on best practice between different sites.

**The Hon. RON DYER:** Before you move on, a short time ago you made a comment that there should not be a response by way of blame or retribution. Is that not precisely how the judicial system would respond?

**Dr TRIDGELL:** I think that if we go back to the litigation and the way that it often plays out in health, it becomes both the health service and the clinician together and it is usually recognised as a sharing of responsibilities.

**The Hon. RON DYER:** You are saying no blame or retribution within the system, but I am saying that if a clinical misjudgment has occurred, the blame would be the adverse verdict and the retribution would be the damages.

**Mr REID:** I agree with you; that is true; that is how the judicial system operates at the end of the day. But I think it is more to the point that, in the first instance, where you pick up variations in clinical practice within departments or between clinicians rather than in the first instance putting the data on a web site or writing to the doctor and saying, "You are clearly out of line. Please explain.", or whatever, we are using more a mechanism of peer review and how the doctor's colleagues look to that doctor to see how he or she is performing. At the end of the day there are clear mechanisms in place when there is inappropriate clinical practice—through the medical boards, through the courts and through the Health Care Complaints Commission—and we are not saying that this should be done instead of that, but we are saying in the first instance that when you display to people some of the evidence, which Paul is about to show, it is best to not do it in the first instance as a blame activity. Rather you try to use it as a way of improving clinical practice or within a group of clinicians you have discussions which, as members would know, often does not take place at all between clinicians.

**The Hon. RON DYER:** Yes, but if the patient takes legal action, someone is going to be blamed. That is the reality, is it not?

**Mr REID:** That is correct.

**CHAIR:** But if there is some issue that just happens, the worst thing you can do is have somebody walk in and say, "Well, I will blame him or her or them. It has nothing to do with me." The issue is like the medical board or the nurses boards; they are protective, rather than punitive. They are there to protect the community from bad practices rather than punish bad doctors or bad nurses. What the director-general is doing with this process is what those boards are doing, being protective and advancing quality rather than finding fault. There are other systems for finding fault. There is a judicial system for finding fault, such as coroners and through litigation and so on. We know that a lot of people do not sue who could sue.

**The Hon. RON DYER:** Yes.

**Mr REID:** In some parts of United States—Paul might remember where, in the southern part of United States—they immediately got the data in variations of length of stay patterns to nursing and other quality indicators and put that on the web site. It caused more problems initially in terms of the fights that took place around the

quality of the data and such things, rather than trying to obtain some collaborative approach to dealing with two or three of one's colleagues whose length of stay for patients is a couple of days longer than is the indicator for the rest of the clinical department. That is the type of thing that is being addressed. We are trying to shift the whole system rather than point the finger at any one individual. There are mechanisms in place where individuals need to be pointed at, and are being pointed at, but this is more focused on the quality of the health system.

**Dr TRIDGELL:** There are just a few more points. I will move on to look particularly at some of the areas of the acute care group. Same day and day of surgery targets were introduced in July 2000. As part of this, we have looked at the clinician level data of the type which I will show you shortly for the high-volume procedures. We were identifying where there is good practice and sharing of the clinical pathways that exist where there is good practice between the area health services. There is also a project under the acute care group to substantially improve the quality and timeliness of discharge summaries.

**CHAIR:** Before you go on, the same-day rates were 60 per cent back in the early 1990s. How did you work out the new day surgery targets? Who was responsible for saying it should be 60 per cent or 80 per cent?

**Mr REID:** It was the clinicians themselves on the acute care committee who reviewed clinical practice around a range of countries. The committee looked at individual hospitals' practice and the variation in hospital practice. I think there is a slide which shows that even at the start of this process there were some hospitals which were above the 80 per cent. But it was a group of clinicians.

**CHAIR:** It was clinician-led?

**Mr REID:** Yes.

**Dr TRIDGELL:** The acute care group comprises about 20 staff members and includes the leading surgical staff and some physicians. It has been a real bonus or at least of great assistance in implementing this program to have such senior clinical leadership support which has been saying to the profession that these are changes that should happen. Part of the setting of the 80 per cent was that hospitals and some clinicians were already working at, or above, those levels, so they were quite achievable. This point picks up the Health Council's recommendation that the clinician leadership should be seen to be working alongside senior management to oversee the setting of clinical practice standards as well as to provide assistance and advice to hospitals in reaching those targets. A sharing of clinical pathways and a sharing of comparative information at a clinician and procedure level are some of the ways in which we are assisting that to happen.

The day of and day only surgery targets are principally about quality. There are certainly a few good randomly controlled trials which show reduced infection rates, improved patient satisfaction, decreased thrombosis and pulmonary embolisms associated with patients coming in on the day of surgery instead of coming in the day before. A fair bit of that is improved preparation in the pre-admission clinical process rather than having patients who are not adequately prepared and worked up and who are coming into hospital the night before. They would be going into theatre a little bit underprepared. There is obviously a benefit also with access because of the reduced length of stay which flows, as well as increased efficiency in patients coming in on the day of surgery.

One of the key phrases or statements which we would make in relation to the acute care group is that we are only asking for what has already been done by some. Another key recommendation of the Health Council was that excellence currently exists but it is often in pockets and we need to share those pockets across the whole system. They are just the targets which were 60 per cent and 80 per cent.

**The Hon. RON DYER:** Why is day only surgery only about improving quality? Are there not other issues, such as costs?

**Dr TRIDGELL:** I mentioned access—access and cost. Sometimes, depending on the procedure, there are different consumerables involved in doing daily versus overnight. For some procedures the cost difference is smaller than one would think, but for some there are bigger cost differences. Cost is one factor but it is certainly not the sole or dominant driving factor.

**Mr REID:** The degree to which this has been accepted by the clinical workforce in New South Wales has essentially been driven by quality. There are good, strong quality reasons why we try to maximise the extent to which people come into the hospital on the day on which their surgery takes place or, alternatively, where it is clinically appropriate for the nature of the surgery, they come in and leave on the same day of their surgery. There are

consequences of that around access and enabling more people to access hospitals if you do not use bed days. But it was quality drivers that have kept people in this process.

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** You may be aware of the work of the rural transport group from NCOSS that studied this issue. That group is horrified about the transmission of cost to families who must come to a hospital the day before and stay overnight before admission and then possibly the next night because of the availability of transport. Therefore, the target of raising the day-of-surgery rate to the highest possible level may not be the best outcome if one looks at it from the patient's home to the patient's home rather than from the hospital door to the hospital door.

**Mr REID:** We will show you a graph later that reveals that rural hospitals have higher day-of-surgery admission rates than metropolitan hospitals. So rural hospitals have the least distance to go to hit their targets unlike metropolitan hospitals, which have far higher targets. That information went against all common knowledge: everyone believed that in rural areas patients were brought in the night before for transport reasons. The evidence is that that is not the case.

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** According the NCOSS data, which was released a couple of weeks ago, all the community transport groups surveyed drew attention to this fact. Have you seen that survey?

**Mr REID:** Yes, I have.

**CHAIR:** We heard evidence from Dr Peacock regarding the difference between a financial cost—the bean counting of a hospital or facility—and the economic cost, including all costs to all parties. The previous slide is incontrovertible evidence that if a person spends a shorter time in hospital you get less of those things depicted. The cost saving comes after you change to day only and day of admission and behind that they start to reduce the number of nursing staff or there are fewer beds. Those savings come after the changes for quality. Nurses in particular get a bit miffed about that.

**The Hon. RON DYER:** Would not a decision regarding day surgery depend partly on a patient's recovery needs and the seriousness of the procedure?

**Mr REID:** We could give another presentation to the Committee at some stage regarding the findings of a committee chaired by Professor Ian Webster, a noted public health physician, which will report in a couple of weeks. That group has been examining what investment we need to make in the community once we start to hit our day-only and day-of-surgery targets and when we try to reduce our re-admissions of chronic care people into the acute hospital system. That group has come up with some quite specific recommendations about the level of investment that must be put into community-based services to support those targets. If we can argue that we get good clinical practice from the things that the Chair mentioned and still provide the appropriate and additional support mechanisms within the community, we will have a win-win situation. That is the real challenge.

**Dr TRIDGELL:** As part of this program we are monitoring the day-of-surgery admission rates and also the unplanned re-admission rates following elective surgery. This is an example of some of the information that we send out to areas so that local clinicians can compare themselves with other information from across the State. The writing on this slide is very small. This is an identifier of an individual doctor from across the State. The doctor has an encrypted number. We then have information about the median or average length of stay, how many patients that doctor treated and his or her daily rate. This data is for elective cholecystectomy. One clinician is doing a bit over 50 per cent and, in that case, 33 per cent are day-only procedures.

**Mr REID:** The surgery is for the removal of the gall bladder.

**Dr TRIDGELL:** This information shows how many admissions came in on the day of surgery and compares the rates of laparoscopic and open surgery. Doctors may try to perform surgery through the keyhole method but then have to move to an open procedure. We can then look at other codes within this data set regarding the use of cells or blood and the number of times that patients return to theatre. You can see that, through those indicators, we are starting to cover a fair few developments and components of quality. Looking at other procedures, you can see from the pattern of ICD10 codes whether people are doing everything as a radical procedure or whether their clinical practice contains a mix of what would be accepted as more modern clinical practice, depending on the particular procedure that we are looking out. It requires a reasonable amount of expertise to understand the different ICD10 codes. You can also look at some adverse event codes that are on that data set.

Within this data, you can then examine whether doctors with high day-of-surgery rates have higher or lower return-to-theatre rates or re-admission rates. For all the procedures that we looked at, those with higher day-of-surgery rates had lower re-admission rates and lower return-to-theatre rates. At an individual level, when you get down to 10, 15 or 20 cases, you often cannot show a statistically significant relationship. All that you can do is see that someone may have a slightly higher rate and then put it in a local context for local hospitals and clinicians to see whether that is an issue. This data is certainly reassuring: it shows that the way we are heading in pushing higher day-of-surgery rates is the right way.

**The Hon. RON DYER:** According to that table, four clinicians appear to have a 100 per cent day-of-surgery rate.

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** That is the day-of-admission rate.

**Dr TRIDGELL:** The daily rate is at 33 per cent.

**The Hon. RON DYER:** I am sorry.

**Dr TRIDGELL:** This is one of the graphs that we sent out on inguinal hernias. I mentioned before using not just a DRG. For this one we have used a specific ICD10 code. It is a unilateral inguinal hernia—it is as much like with like as we can get within the data set. Each one here represents an individual doctor. This shows the number of cases and the daily rate. The pinkish dots refer to people doing paediatric cases. You can see that those doing paediatric cases have a daily rate of about 90 per cent. Yet if you look at the adult cases you can see that individual clinicians doing unilateral inguinal hernias have daily rates of above 80 per cent and a large number down the bottom have zero. According to the information provided, virtually all area health services—these red triangles are the area health services—have clinicians with high rates and low rates. They work at the same hospital with exactly the same infrastructure and equipment yet there are differences in clinical practice.

**CHAIR:** I refer you to the pink squares clustered on the left-hand side of the slide and the figure of 40 per cent. Does that mean that the admitting doctor usually does only three or four a year?

**Dr TRIDGELL:** Yes—when you have very small numbers here. I often truncate these graphs to at least 10 cases so that there is an adequate sample size.

**Mr REID:** This is a very good example of a set of indicators showing quite a considerable degree of variation in clinical practice. We are trying to map that clinical practice, feed that information back to the clinicians at individual hospitals and start to seek their advice on how to manage it.

**Dr TRIDGELL:** You need to look at age splits and principal procedure codes. You need expertise when looking at this information. This graph looks at adult unilateral inguinal hernia rates in rural and metropolitan hospitals for the current year—the other slide referred to the previous year. You can see that rural and metropolitan sites have a similar distribution of clinical practice. If you look at other procedures such as elective cholecystectomy and the average length of stay as against admission, you can see that once again there are large variations among individual clinicians. Those variations exist in both metropolitan and rural settings.

**CHAIR:** Did you say that individual clinicians have big variations?

**Dr TRIDGELL:** These are individual clinicians and their averages. The clinician's length of stay for a procedure may have quite a reasonable range while other DRGs or procedures may have quite a narrow length of stay.

**CHAIR:** So the guy who is represented by the red dot on the side of that slide has 100 cases a year and his average length of stay is one day.

**Dr TRIDGELL:** That is correct.

**CHAIR:** That compares with the guy on the far end who is doing only 10 cases per year and has an average length of stay of five days.

**Dr TRIDGELL:** That is correct.

**CHAIR:** That assumes that they all have the same quality of outcome.

**Mr REID:** Paul's point is that, although this person has 40 admissions and an average length of stay of two and half days, he or she might have some with an average length of stay of four days and some with one day. It is an average for the doctor in that place.

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** If someone has 100 day-onlys you would look at whether all those procedures were necessary, would you not? None of the patients get sick and they can all return home the next day. You would wonder whether there was anything wrong with them.

**CHAIR:** They spend one night in hospital and then leave the next day. Is that correct?

**Mr REID:** I think we would prefer to look at the other side of the coin.

**CHAIR:** This is the procedure that Laurie Brereton used to describe as "unnecessary surgery". He used to call it unnecessary but in fact they are cases where there are not absolute, agreed and set down indications for surgery.

**Dr TRIDGELL:** There is some variation.

**CHAIR:** It is not elective but discretionary.

**Mr REID:** There is good debate around that topic.

**CHAIR:** So there may be something in what Arthur says: if someone is performing 100 surgeries and their patients are leaving after one day, the indication for surgery might not be as tough as for someone who has had two or three gall bladder attacks.

**Mr REID:** That is correct: that is one question you would ask from the data set for that individual clinician.

**CHAIR:** That might be an indication that you need to look at whether that person is doing the clean ones who should not have had surgery in the first place. That information helps you to identify that trend.

**Dr TRIDGELL:** This graph shows day-of-surgery rates for elective cholecystectomy. Most people have day-of-surgery rates well above 80 per cent, but some clinicians had significantly lower day-of-surgery rates.

**CHAIR:** There is that guy again at the top of the graph with a 100 per cent day-of-surgery admission rate. I assume it is the same person, is that correct?

**Dr TRIDGELL:** Yes.

**The Hon. RON DYER:** What moral do we draw from all this information? Are we saying that the clinician's judgment as to whether to put someone into day surgery is substantially a matter of statistical practice by other practitioners, or is that just one element in his clinical judgment?

**Mr REID:** In an earlier slide we indicated that there is a degree of variability around clinical practice. Clinicians need to develop better clinical protocols and the development of those protocols—what we call "clinical pathways"—would start to bring together, where appropriate, some of the variations in day-only, day-of-surgery and length-of-stay rates. They are only three indicators. There is a range of other indicators regarding whether someone has an indication for surgery—Dr Chesterfield Evans mentioned that—or the nature of the intervention, for example whether it is an open or closed procedure. It merely indicates the need for clinical protocols and clinical pathways to be developed, and that is an international task.

**The Hon. RON DYER:** But I take it you are not saying that the individual clinician and his or her position is solely governed by statistical experience?

**Mr REID:** No. It is more governed by his or her education, training, peer review wherever they exist and common practice.

**CHAIR:** Where they were trained?

**Mr REID:** Yes.

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** The tail can wag the dog, though. In my experience, in workers compensation cases that were managed by a computer, when certain parameters of time and so on were keyed in it was found that after a certain period of time if a patient had a certain diagnosis he or she was unlikely to get better, so you stop the compensation and force the person to go to court. Effectively, everybody came to a mean.

**Mr REID:** I think that is true.

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** The need was driving the behaviour.

**Mr REID:** Absolutely true.

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** And that is quite dangerous.

**Mr REID:** There are two things here. You can mandate day of surgery statewide for a system and you can mandate day only—we want to get to 80 per cent or 60 per cent—but you cannot mandate clinical protocols. At the end of the day a clinician is trained to identify variations in clinical practice. But you can certainly provide guidance for clinical pathways. This data would suggest that some of those clinical pathways are probably needed. But it is not a mandating.

**Dr TRIDGELL:** This slide looks at elective hysterectomy, again looking at metropolitan and rural. Hysterectomy, cholecystectomy and major breast are all procedures where there seems to be a wide range of practice. They are some of the ones for which we are developing pathways that Mr Reid has referred to. When I did my presentation to the areas of public quality I put up this slide because it does not mean anything. It is another example of the: if you do not understand the coding behind particular procedures you can readily produce information which, to the uneducated eye, looks, perhaps, meaningful, but really does not mean anything. That is because this particular DRG of anal procedures is actually made up of four or five different procedures where you have excision of anal fissure, rubber band ligation of haemorrhoids, excision of anal fistula and haemorrhoidectomy.

These column graphs show the number of admissions by how many were done same day, one day, two days, three days, four days and five days. You will see that the one procedure that produces all the variations in length of stay is the haemorrhoidectomy. This is also another procedure which, when you look at our clinician level, you see that all his or her patients were in one day, two days or three days. The length of stay distribution of a DRG is a distribution of clinical practice rather than a distribution of patient morbidity.

**CHAIR:** One surgeon will keep all of them for five days and another will keep all of them for one day. Or is it that surgeon A will keep them for one to five days and surgeon B will keep them for one to five days?

**Dr TRIDGELL:** This procedure is far more that they are all in for three days for one surgeon or they are all in for two days. It is not an absolute rule for every doctor, but within this procedure—

**CHAIR:** An individual doctor has a rule that the patient is in for three days, four days or five days?

**Dr TRIDGELL:** Yes.

**CHAIR:** You have the five-day doctors and the one-day doctors?

**Dr TRIDGELL:** Yes.

**CHAIR:** But, of course, the patients are patients.

**Dr TRIDGELL:** Yes.

**CHAIR:** Some of whom might have liked to have gone home on day three, day four or day five, but they go home whenever the doctor says?

**Dr TRIDGELL:** Yes.

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** All of them used to be seven-day patients because doctors admitted—

**CHAIR:** No, that was bed blocking.

**Mr REID:** We will come to that.

**Dr TRIDGELL:** If you look at day-of-surgery rate by metropolitan and rural they show what Mr Reid said before about the rural rates having moved a little bit higher and, of course, the metropolitan rates that were down quite and have now moved up to close to where the rural areas are.

**CHAIR:** That is adjusted for DRG?

**Dr TRIDGELL:** That is all elective surgery admissions.

**Mr REID:** All day of surgery.

**Dr TRIDGELL:** This is for one particular specialty, which is the specialty of general surgery, which shows where we were before in some of the different hospital types. We had day-of-surgery rates in an individual hospital, which was 26 per cent in 1998-99. In July and December the lowest was 65 per cent. The highest was 80 per cent in teaching hospitals, and now the highest is 91. The average has moved up, the lowest has moved up substantially and the highest has also moved up. That is the same for teaching in large metropolitan and rural-based hospitals.

**Mr REID:** We cannot overemphasise, in a system that is very difficult to change in a Titanic-like way, the impact of something that has occurred in a very short timeframe that has had quite a dramatic effect. It was devised by clinicians, oversights by clinicians, argued as required for quality reasons and can only be described as a dramatic change in the health system.

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** Part of this is technological, is it not? You brought the scopes in, so let us do it.

**Mr REID:** No, this is over a very short timeframe. If you take the timeframe even from this time last year to this year in the previous—

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** If you brought in a scope so that all your cholecystectomies or prostates could be done by scope when they were not done that way before because they did not have scopes, obviously you could get that improvement in your rates when that machine came in.

**Mr REID:** That is true, but the impact of that is over many years. In March of last year, or even later, the impact of putting the 60 or 80 per cent targets in place in terms of the impact upon clinical practice in one year, nothing to do with any technology, has been dramatic.

**CHAIR:** Hilmer wrote his stuff in 1995-96 from Liverpool, which was the first hospital to start doing this, so that has been around for a while and that is what records your 26 to 80 per cent figures, depending on hospital. But the big change is certainly because of the clinical councils saying that this is the way to go. It is incredible to see those changes. Northern Rivers is now up to about 96, 97 per cent day surgery admission.

**Dr TRIDGELL:** There has also been an improvement in the daily rates. There are some procedures that have moved from a daily to an ambulatory-type setting, so that the improved performance is actually better than what is stated in this slide. But, again, there has been a marked increase in the daily rate.

**CHAIR:** Why has the lowest in the teaching hospitals fallen from 37 to 35, and why is that still tolerated?

**Dr TRIDGELL:** There are a couple of areas that have performed reasonably poorly in the metropolitan areas, and we have done a specific analysis for them. They initially said that it was because they were doing very complex work. The analysis showed that it was inguinal hernias, fairly common things. They could meet their targets if they change their practice. They are improving. You have the July to December figures there.

**Mr REID:** You will find that the January on figures for the lowest, which relates to one hospital, is a substantial improvement for the metropolitan teaching. And, again, it is because of clinicians taking on board that this is for real and they need to change their clinical practice.

**CHAIR:** That the whole thing is that it is better for patients, and that is what is driving it.

**Mr REID:** That is right.

**CHAIR:** Although they are convinced about it, sometimes administratively it is a little bit hard to do. You have been able to convince the hospital that it is administratively feasible to do it?

**Mr REID:** Yes. And they keep whatever savings because they have a three-year budget.

**Dr TRIDGELL:** To reiterate the interpretation issues, you often end up dealing with small numbers, which may or may not be statistically significant. Some data quality issues with our hospitals code record sometimes slightly differently in different places, that one needs to be looked at; and you need local interpretation of variations that exist. There may be reasons why more difficult cases are always referred to one particular clinician and that is quite a plausible and reasonable explanation for the pattern that we see in information.

**Mr REID:** We gave an undertaking that we would be here until three o'clock. As I indicated, I have another appointment. I am happy to come back to complete it, but we would not complete in the time that is available. There is probably another 45 minutes or thereabouts of presentation to go. We seek your assistance in how we might handle that.

**CHAIR:** Professor Gibberd is coming at 3.30 p.m. You need to be away from here well and truly by half past three.

**The Hon. RON DYER:** I understood him to say that he had to be away by three o'clock.

**Mr REID:** I have to be away because I am doing another presentation at Premiers. I have to get there early to set up again.

**CHAIR:** We could reschedule. What Mr Reid has to say is exactly what I want to ask the chief executive officers of the area health services: how they are complying, what they are doing, how they are getting there and so on. We need to know what he does, how he does it and how it is driving quality. We will set up some times at the end of today's program. If you could identify to our staff when you are available, we will set ourselves up towards the end of this month for the regional CEOs; I think there are seven of them. You were going to provide us with information on Port Macquarie costs. We do not seem to have those yet.

**Mr REID:** I sent you a letter on 28 June in response to all the questions you asked at my previous appearance. Included in that was information, comparative activity Macquarie Base Hospital, which was a question you asked of me.

**CHAIR:** It was not budget estimates.

**Mr REID:** No, that was my appearance before you previously.

**CHAIR:** I am sorry, but I have not seen that. If I had I would not have raised it.

**Mr REID:** It contained a whole lot of extra material, including the general practitioner after-hours report from Maitland and lots of other documentation.

**CHAIR:** I certainly have the GP after-hours report and we have the yellow book, which has the 1998-99 information in it. It does not have a whole lot of information in it, that is why we need that information.

**Mr REID:** I will send a copy of this letter into the secretary.

**CHAIR:** Will get back and liaise with you for another day.

**(The witnesses withdrew.)**

**(Short adjournment)**

**ROBERT WILLIAM GIBBERD**, Associate Professor, Health Medicine and Health Sciences, University of Newcastle, 213 Croudace Street, New Lambton, affirmed and examined:

**CHAIR:** In what capacity do you appear before the Committee?

**Dr GIBBERD:** I represent the Health Services Research Group. I wrote a 1½ page submission, which I will discuss.

**CHAIR:** Are you conversant with the terms of reference of this inquiry?

**Dr GIBBERD:** I am.

**CHAIR:** If you should consider at any stage during your evidence that in the public interest certain evidence or documentation you may wish to present should be heard or seen only by the Committee, the Committee would be willing to accede to your request. I warn you that the Committee's decision to keep that secret may be overridden by a full vote of the House, although that has never happened. Would you like to make an opening statement?

**Dr GIBBERD:** I will go over the short document I wrote before. When planning a health service there are three issues which need to be correct; first, a strategic plan forecasting future demand for beds; second, appropriate resource allocation to the hospitals and the areas, and, third, a focus on quality and equity. I have been working in those areas for 20 years now, mainly in New South Wales but also in Queensland and for the Federal Government. Generally we have moved a long way from the 1980s, when I began, when data was not used very much for planning, resource allocation and quality.

In the past 10 years there has been quite a dramatic change from using data for looking at the services that are provided. My main comment on resource allocation is that in Australia there are two methods; one is a case mix based, or fee-for-service based, funding of hospitals as seen in Victoria, South Australia and the Northern Territory. There is a mixture of that in Queensland. The second method is a population-based funding approach, which occurs in New South Wales and was used by the Ageing and Disability Department for its resource allocation. That population-based formula is also used in Education.

One of the difficult issues is to determine which is the best approach. Current findings would be that both methods contain perverse incentives. Obviously, a fee-for-service basis of funding has the inherent problem of overservicing, because it pays an average cost for everyone who is seen.

**CHAIR:** And with a bit of cherry picking on the side?

**Dr GIBBERD:** Yes. Those accusations were made about all the fee-for-service funding, even at the GP level and also at the hospital to level. The problem with the population-based funding is that it may encourage complacency. With a population of X, the service will get 10 per cent of the State's budget, no matter how much work is done; the service need not bother to reduce waste, and rework, and so on. They are the sorts of issues that are raised. It all comes down to, and people recognise, that with either system there must be other monitoring tools to make sure that the system is working well and that the perverse incentives are not getting out of hand.

New South Wales has done a lot of work on efficiency measures at hospitals to make sure that length of stay, cost per bed day and admission rates are consistent across the hospitals. If that is the case, we can argue that the perverse incentives are not working against the funding system. Victoria has measures of equity to try to make sure that everyone has equal access, even though it is a fee-for-service funding. Victoria also monitors to make sure that those hospitals with bigger capacity to put through extra people do not provide higher utilisation or service rates in Melbourne compared to rural areas.

Basically both methods have a problem, and they need to be monitored. However, there is now a general switch to population-based funding. The Commonwealth was against it in the 1990s and said that the fee-for-service, the case mix-based funding, would produce higher efficiencies. The Commonwealth recognised other problems about equity. Currently we are doing a major project to compare Victoria, New South Wales and Queensland to determine whether funding over the past 10 years has made one system more efficient than another and whether one system is more equitable than another. At this stage I cannot give you that answer, but we are programmed to have it finished by the end of 2002. It is a major project.

**The Hon. RON DYER:** When you said "one more efficient than another", do you mean whether one State is more efficient than another?

**Dr GIBBERD:** Yes, or even within the State. The fee-for-service case-mix based funding may work better in Melbourne than at Horsham because of less pressures, or whatever. We are looking within the State as well.

**CHAIR:** In regional New South Wales, which is the subject of the Committee's inquiry, we still have not quite hit RDF fair sharing. The mid North Coast is still a bit behind and is meant to catch up in 2002-03. The equity of mental health funding on resource distribution formula basis is said to be in place in four years time. You will be able to compare New South Wales population funding, in equity terms, by the time that that is complete. Given that the system has been moving towards that for some years, I suppose it is a population-based funding which is equitable at the beginning.

**Dr GIBBERD:** Yes. The resource allocation funding came in in 1990 under Peter Collins; that was the first time that the State decided that that was the way to allocate funding. The inequities were quite large in 1990 and have been wound back over the past 10 years. By 2001 we are much more equitable than we were. Obviously half would be behind and half would be ahead by a fraction, but not in the large amounts that existed in 1990. Central and Eastern were overfunded when compared with the North Coast and South Coast.

**CHAIR:** How does that sit with the Minister's new plan for giving people equitable funding? For example if patients live in central Sydney and are operated on in western Sydney, the Central Sydney service has to pay the Western Sydney service on a DRG base for that service. That is a mixture of allocating funding.

**Dr GIBBERD:** The way the formula works is that you calculate the population for central Sydney. You age-sex weight it, you adjust it for the health index and then you subtract off the private flows, deduct it by 30 per cent, and subtract a fair proportion of private flows off, and then you subtract the average costs for all the flows outside the region and then you add all the flows into the region. That is how you finally work out what the funding should be for public hospitals in central Sydney. So, the flows are accounted for in the model and there is no need to cross-charging, because the model already has it built in. If you go to cross-charging, you will have to remove the flows from the model and handle that separately. I have always argued that we do not want to cross-charge. It is an expensive way of doing things. It is better to put it in the model. So, flows in and out of central Sydney adjust the total funding for central Sydney.

**CHAIR:** The reason I ask the question is that the Minister is now moving to the new model of charging for the flows. In my own area I think it is \$19 million of outflows and \$9 of inflows for the Queensland border thing. I think they will have the money invested in them this year to cover that and then of course there are incentives for them to bring that money home but the problem then lies in what if somebody from Northern Rivers Area Health Service cannot wait 12 months and the bone and joint at Prince Alfred or the new bone and joint the Hunter set up says come down and see us, we will do the job, but the Northern Rivers still has to pay for it.

**Dr GIBBERD:** I have actually argued against putting the flows into real dollars so you cross-charge. It is an administrative nightmare. In England it caused so much trouble they had to abolish it because every time an out-of-area accepted one of your patients you had to phone and get approval. In 1990 we had the flows built into the model, and we still do. We can even project the magnitude of the flows for next year and the year after and build that into the model. The way New South Wales Health did that in the past, and I did a lot of the computing, was to put it in the model. That saves the administrative nightmare and flows are predicted fairly accurately. In any model there is not just the flows that cause the problem, there are the population projections, the health needs index, the age-sex weights, all these have an uncertainty about them, and the flows are predicted as well as any of the other components. In principle there is no need to do it. The reason it is in, I gather, is the push from Treasury, who says by doing this we will add a bit of competition into the system and regions will compete for each other's patients, and once it is competitive we will get a better system. I argue all the time heavily against notions that we can possibly compete, because there is no-one to compete against unless they go to Brisbane or Sydney, and that is not a sensible form of competition.

**CHAIR:** What then would drive the average cost of a DRG? We have been talking about gall bladders today. Say an area has its proper amount of funding yet it is squandering money in the acute overnight part and not funding or poorly funding its community-based services. How do you pick up those internal inequities?

**Dr GIBBERD:** The original 1990 RAF, when we introduced that, areas made the following claim—that if you have a population-based amount of money for your area it is your responsibility to spend it wisely. If you admit

too many people for a particular procedure, that means you are depriving other specialties. So, if ENT is too high, obstetrics may be too low. Someone had to cross-subsidise excess expenditure in ENT. Therefore, the area had to take an active role to make sure funds were allocated equitably across the different specialties. That also meant the flows out and also the private sector, that the area should be quite active in monitoring that. In some sense areas have had reports during the past 10 years on where they differ from average. There may be the NSW areas for them to look at why there should be more in one specialty than the rest of the State and less in other specialties. That is the way a population-based funding formula in principle works. In practice it is very hard to use the data and then work out how to reverse overutilisation or underutilisation. The underutilisation may be lack of services or lack of staff. The overutilisation may be because you have too many staff or too many services, and to adjust all that is quite a hard job.

I think, and the study I mentioned earlier will show, that over the past 10 years—and one of my PhD students is writing this up—is that the variation across areas is actually shrinking and they are moving towards a more common rate of admission. So, there is some evidence that the population-based funding, by making it based on population needs, means that the admission rates tend to be more equitable than they were. That is how it should work in principle. In practice, of course, it is a complex system and you do not have a lot of control over many of the components.

**The Hon. RON DYER:** Is it not possible, to take an example, ENT procedures might vary markedly from what they did in the preceding year just randomly?

**Dr GIBBERD:** Yes. In all of this we adjust for random variations as far as we can. Usually when we quote variations it is six standard deviations away.

**CHAIR:** What do you do when that happens? Say the cut-off date is June. You can only get that information and do anything with it, say, August of the next funding year. How do you bring to the attention of an area health service that they got a bit out of kilter?

**Dr GIBBERD:** In one year there may not be enough data, but I could give an example of North Sydney Area Health Service where the myringotomy rate is 500 excess every year for the past 10 years. That is 5,000 over the past 10 years, and is absolutely constant. They know about it, they know the problem. You saw in the workshop in the Northern Rivers the methods to try to revise that rate, and the one in North Sydney we put up as a very interesting quality problem to try to get a handle on it. Other areas have brought their rate down significantly.

**CHAIR:** Especially for a procedure that does not have a lot of good science behind it.

**Dr GIBBERD:** That is right. Well, the science of 10 years ago seems to be out of date.

**CHAIR:** So, you can highlight these differences or variations. That does not necessarily mean there is a great quality variation, does it, unless those numbers are adjusted in the same way as the population is adjusted?

**Dr GIBBERD:** Yes. I might backtrack a bit into the quality, because we probably discussed the resource allocation, and two of the items on your agenda were resource allocation and quality of health care.

**CHAIR:** Do you want to say more about resource allocation, because that is important. We have had a presentation from Dr Peacock, and you know his work, and he has followed it up with a critique which we recently received. The difference between the funding that is measured by this NHCDC method and the IAHW is really a difference between the States and how they report. But he discusses the positives and negatives of the difference between DRG funding and case-mix-base funding. But, since we are all in New South Wales and there is no variation in what happens in New South Wales, I did not think that was terribly relevant.

**Dr GIBBERD:** It is very noteworthy that New South Wales has stuck with the population base funding formula despite a lot of push from the Federal Government to do otherwise. That was a smart move. I have already told you that I do not believe the cross-charging of flows will achieve anything except wasteful administrative work. My other comment is that some regions are always growing and they tend to lag a bit. You do not want to overshoot and then have to cut back, so you tend to lag. The coastal regions tend to be a bit below. Those that are shrinking, such as Bathurst and Orange, tend to be above but coming down, and you do not want to overshoot again. So there is always this delay. Some politicians thought that we could actually get everyone on target in two years. That is not a sensible procedure because we are aiming at a moving target. If it keeps on moving, if it is going up, we should be slightly behind and we have to wait until the capital works are in place.

**CHAIR:** It hurts people when you take money away from them. If you try to do it without a growing budget it is difficult. Are you comfortable with the current resource distribution formula, which now includes tourism, Aboriginality and rurality? Are you comfortable with the methodology that is used?

**Dr GIBBERD:** Don Hindle has written an article about this—at least he told me he was writing it. He believes it is the best formula in the world. More research, more effort, and more consideration about what is required in the formula has gone on in the last ten years than probably in most departments. It has been a consistent policy tool devised by the department.

**CHAIR:** It has been refined. How much of the New South Wales Health budget is allocated on that basis, to your knowledge?

**Dr GIBBERD:** I do not do the implementation. The implementation of the formula requires other information that is known internally to the department. I do not want to get involved in it. It involves matters such as when the capital works programs are ready to be completed. You may have a jump in the formula. Once the Coffs Harbour facility is built it goes up and so on. That is something to be done internally with knowledge about how you need to adjust as a result of capital works. I believe it is done pretty well. From what we know over the last 10 years, the regions are much closer to their target share than they were 10 years ago. When we started in 1990 our goal was to reduce inequity by 50 per cent over 10 years. In fact, I think we have reduced it by much more than 50 per cent.

**CHAIR:** The Director-General told the estimates committee that for most parts of the budget, excluding mental and dental, that would be complete by the end of the 2002-03 budget. The mental health had another four years to run. For the others, in 10 to 15 years we have got to that stage.

**Dr GIBBERD:** It is similar to what was achieved in the United Kingdom when they used the same sort of formula.

**CHAIR:** Would you tell us about quality?

**Dr GIBBERD:** I mentioned in my document that quality is an issue that did not get a lot of publicity 10 years ago. Everyone was focused on efficiency. The reason for that is that many people thought that all hospitals and all surgeons are the same, there was not a problem.

**The Hon. RON DYER:** Why would anyone assume that all hospitals and all surgeons are the same? That sounds irrational.

**Dr GIBBERD:** I know but the public really believed that. Overseas studies have shown that when you ask the public and even show them that a hospital has a lower mortality rate than another, they will not go to that hospital because they have other information or they do not really believe that the differences are real. If I could put it in terms of purchasing a car, not all cars are the same but the motor companies manage to sell all sorts of models. There are a lot of other problems besides the numbers we produce for quality.

**The Hon. RON DYER:** Some models of cars sell more than others.

**CHAIR:** When there is no price signal involved, one would think the public would be even more sensitive to quality. However, there are no quality indicators for them to judge anyway.

**Dr GIBBERD:** We have not provided them with the indicators but I would not be surprised in 10 years if a person had cancer of the colon he would want to know how many such procedures a surgeon does per year. I am writing up an audit of that particular procedure. We audited 2,000 cases and most of the 550 surgeons were doing an average of 3 per year, or something like that. There were a lot of surgeons. One of the problems is that we have a system that allows surgeons to undertake a wide range of work. We have to query whether that is appropriate. That causes some of the variation. I do not think the public is aware of that.

**CHAIR:** You may have to wait 10 years to see a statistical difference between the work of one surgeon and another.

**The Hon. RON DYER:** Would it not be the case that a general surgeon would do a wide range of procedures?

**Dr GIBBERD:** They do cancer of the colon procedures less than cancer of the rectum because that is a bit trickier and it is hard to get into. It is difficult to show that they have a worse outcome. There is increasing evidence from overseas. I am reviewing an article at the moment about cancer of the uterus showing that general surgeons seem to have worse survival rates than specialist oncology gynaecologists. Once that gets out, people will start demanding if they have cancer of the uterus to go to a gynaecologist who specialises in cancer. That will improve the quality in the long run.

**The Hon. RON DYER:** Would that apply for every procedure? Are you arguing, in essence, that general surgeons should be abolished?

**Dr GIBBERD:** As technology gets more and more sophisticated, and laparoscopic procedures are pretty sophisticated now, one will have to accredit surgeons every year to make sure they do enough work and the outcome is good.

**CHAIR:** Certainly that has happened in breast surgery. Not all general surgeons do breast surgery. There is now an accreditation process and surgeons have to be accredited, otherwise they do not get referrals from breast screenings and so on.

**Dr GIBBERD:** Yes. All of this accreditation is starting to be thought about now. Ten years ago it would not have been the case at all.

**CHAIR:** We do not know whether it will change quality.

**Dr GIBBERD:** In 1990 we produced reports for four pilot hospitals illustrating quality problems using data. One of the hospitals, Tamworth, selected one of the reports and did a system review of the particular cases, changed the process and improved the quality quickly. With the other three, the CEO grabbed the report and said, "We will use this to beat the surgeons up." The attitude 10 years ago was confrontational, that the surgeons were the problem. The way we look at quality now is that all the staff want to do quality work but the system often prevents them from doing so. We have to redesign the system. That is where the attitude is beginning to change. We no longer beat up on individual surgeons but recognise that hospitals are complex. A change of attitude has to be brought about inside the hospital.

**CHAIR:** This is a difficult question for me to ask. Say, using Paul Tridgell's methods or through one of your reviews of a private or public hospital, you identify a surgeon who has horrendous infection rates and although it is brought to his attention time after time he still keeps operating. In the protection of the community, what can be done under the current circumstances to either ask the surgeon to stand aside or to advise patients they should litigate against him?

**Dr GIBBERD:** I can only quote from our own region. We had such a case. Clinical governance now gives the authority for the hospital administration to call the doctor in and point out the problems. The other surgeons were tired of coming in and rescuing patients that he had managed to mess up. He was told he had to go away and get re-educated, that he could not do any more procedures until he retrained. He went overseas rather than do that because, presumably, it was a way out.

**The Hon. RON DYER:** In such a situation, would it not be possible for the governing body of the hospital to intervene and redefine the clinical privileges of the particular individual?

**Dr GIBBERD:** They did, and he was offered retraining before he did anything more.

**The Hon. HENRY TSANG:** Can he appeal?

**Dr GIBBERD:** The data was pretty clear. These people probably realise they are not as competent as others because they have to call in others to help them when they get into trouble.

**CHAIR:** There is an appeal mechanism.

**Dr GIBBERD:** Clinical governance, which has been introduced in New South Wales and in the United Kingdom, gives the authority to do that. In our region we may even have the surgeons accredited within a year or two.

**CHAIR:** Is there a reporting mechanism of identifying a person, perhaps an anaesthetist or a surgeon, either overservicing or badly servicing other than by coffee room talk—such as, "I think Fred has had too many of these problems", "Yes, I have seen four or five." There may be a very good reason why a particular surgeon has lots of wound infections. For example, he might do a lot of dirty bowel, ruptured bowel or urgent procedures. How do you pick up the one who needs governance?

**Dr GIBBERD:** There are two parts. One, there are established protocols and pathways they should follow. If a surgeon is not using any anti-biotic prophylactically before surgery or stockings for the DVTs, then the hospital can say he has to because best practice says that is what doctors do. In principle, they will come on board. The second one is where surgeons have bad hands; basically, they are not good at doing surgery. We could say the Bristol doctors in paediatric surgery had poor ways of doing things and took an enormous long time. The measures you would use for that would have to be feedback from other staff, which is a bit tricky, and then to follow up and see that they spend twice as long in the theatre than anyone else, they have more readmission rates and more deaths. That would provide enough data. It takes a long time to get enough information. It might take six years to accumulate enough data because of the random variation to be able to say, "Over the last six years you are twice as bad as other surgeons and, therefore, you should not be doing this procedure." That is what happened in Bristol.

**CHAIR:** It is difficult. If you just refer to the length of time a surgeon takes to do a colectomy, for example, that would not even be recorded.

**Dr GIBBERD:** Yes, it is in the operating theatre reports. You can actually drag it out.

**CHAIR:** Is it recorded on the computer digitally and able to be accessed or do you have to get out all the notes and go through them?

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** You cannot say that the fastest is the best.

**CHAIR:** I did not say that. I am referring to a person who regularly took 4½ hours, had high infection rates and so on. Some doctors have low infection rates because they are very careful and take forever to sew up the belly. If a person took four hours, as the anaesthetist I would say I do not want to work with him because I cannot make money out of him. If he did not have any infection rate I may encourage my friends to see him because he is a careful operator with good results. How do you get the information about the length of time because there is the cost factor as well?

**Dr GIBBERD:** About four years ago we got the information through the Hunter hospital to compare time. It is in the operating theatre computer systems.

**CHAIR:** It is in the computer?

**Dr GIBBERD:** But not in the main one. I do not think it is passed to the central office. I would think that in the long term perhaps operating theatre time should be part of the computer system.

**CHAIR:** Because it goes to the issue of value for money, does it not? I mean, a surgeon will say four hours rather than two hours.

**Dr GIBBERD:** If we had that then you would have to be very careful how you interpret it. It would be very difficult to interpret. There are not many studies but there is one in America showing that for prostate the fast guy did better than the slow people. He got in and out quickly and his outcome was better than someone who did it very carefully and got everything fixed up nicely.

**The Hon. RON DYER:** People are different though, are they not? The slow one might not necessarily be inferior in a given case.

**Dr GIBBERD:** It depends. In the case of cardiothoracic surgery, the faster you are the better.

**CHAIR:** And the less time you are on bypass.

**Dr GIBBERD:** Yes. It would not be so obvious with prostate, but the American study shows that it seems to be better. Perhaps it is because the body recovers quicker; it is all sewn up and not exposed to the air for so long. I do not think anyone knows the biology of it. We certainly know the biology for heart bypass because the longer you keep the heart out of action the worse it will be to get it started again. I think those issues will always be hard to

measure and we will have to rely on overseas studies because they collect that data now in America and they use it to ask why and how it is for this procedure.

**CHAIR:** It has always amazed me, just as a matter of interest for this inquiry, if nothing else, that one of the most expensive parts of a hospital is the operating theatres. One operation, four nurses, two doctors plus the anaesthetist—five or six staff—are all expensive. Hi-tech equipment, sterilised equipment, the instruments themselves are worth an absolute bomb. Theatre utilisation is measured but the cost is not applied. For every ½-hour wait, you could lose \$2,000 easy, or an overrun of time. The John Hunter hospital in Newcastle cuts everything off at 2.30 p.m. It does some crazy stuff but that is how it copes with its budget.

**Dr GIBBERD:** It is recognised that there are savings to be made in organising the operating theatres more efficiently. In the past five years there have been quite a few studies of how to schedule patients so that there is less wastage, how to schedule so that you do not run over time and swap patients booked into one theatre into another one if they get ahead and all that sort of thing. There is a lot of research into trying to sort that out. I looked at it five years ago but we did not come up with any great solutions. However, I think other people in other hospitals have managed to make some progress in that area.

**CHAIR:** Again, that is value for money and quality of service. If things are cheaper or quicker does it mean that it is better quality? That is the tricky bit.

**The Hon. DOUG MOPPETT:** For laymen, we base ourselves on common experience. It seems to me, certainly in my lifetime, there has always been, for serious surgery, clear identification of people who are outstanding in their field, and if you can possibly afford to get to them that is what you do. So the identification of the fast, the efficient, the person with the good outcomes, it is partly patients talking to each other, it is partly doctors they consult who feel that the best outcome is Dr Morrow—that is going back 40 years, 50 years. They identify themselves without any systemic thing. When you get to these other people you have been talking about, you are almost talking about incompetence, not simply the best outcome. It is not simply a choice between a good, a very good or an excellent surgeon; you are talking about someone who should not be practising. When you say that the system has had to intervene, you are talking about incompetence.

**Dr GIBBERD:** One of the problems with quality is where there is incompetence. You can call them the bad apples or whatever. That is not where most of the costs are. Obviously we need systems to pick up incompetents and then retrain, redeploy, whatever. The role of clinical governance is in principle to help the area have more control over that. In the past others used to cover up for the incompetents, not just in health. We used to cover up for alcoholics in the university. We can cover up for our alcoholic staff members and the students probably get a better experience, but covering up for an incompetent surgeon does not necessarily mean that the patients are getting a better outcome. They are getting a worst outcome.

Perhaps the other thing that I did not finish off about quality which relates to rural-urban stuff is that during the past 10 years one thing we have always looked at is whether rural and urban differences exist. The only thing I could say there is that I was involved in the quality Australian health care study—the one that came out about 14,000 deaths and so on. I was responsible for the design and analysis of that. One of the amazing things there was that there were no rural-urban differences. The reason for that was that there was a huge variation between the teaching hospitals, between the base hospitals and between the other hospitals. The problem is that there was a variation but it was not systemic across urban and rural differences.

In a more recent study we have done on clinical indicators we have reported whether urban and rural differences exist between hospitals. Again, it rarely appears as an important factor. We looked at teaching, non-teaching, rural and urban, public and private, and the States to see if they explained the variation in the clinical indicators. I can remember one—I think incomplete excision of skin cancer was high in rural and low in urban, and we flagged that is something that the College of surgeons should investigate. But it was hardly an important variable.

One thing that comes out of my original presentation is that at this stage there is not a lot of evidence that the quality of care in rural areas is that much worse than the quality of care in city areas in terms of these indicators or adverse events and so on. That is a bit surprising in a way because you would think the experts would be in the teaching hospitals and the generalists would be in the rural areas. Most likely the problem is not the staff but the system. The teaching hospitals have very complex systems which are very prone to error—lost records, things never get back on time, big delays in getting access to things. You would not find that to the same extent in a base hospital where everyone knows everyone. They work as a team and they consult. When I move into a teaching hospital in the city I notice that there is not a lot of communication, but if you go to a base hospital everyone knows everyone.

Perhaps part of the saving grace for smaller hospitals is that they work as teams rather than North Shore where it is very hierarchical.

**CHAIR:** One issue becoming prominent, and it happened in the *Northern Star* just this week, is complaints by the surgeons in Lismore that patients could access radiotherapy only by going to Brisbane and spending a lot of time and money while they have the treatment, going to the Gold Coast and paying privately, or simply having the radical surgery. A complaint was made some years ago about a woman from Penrith who was very concerned about travelling to Westmead for radiotherapy and therefore had a breast lump off. The people of Penrith said that it was terrible that people must travel that far for radiotherapy. When it is 3½ hours it is quite a long way, rather than 20 minutes down the road to Westmead. However, the issue of availability of some of those modalities would make a difference in outcomes. If there is a difference, how do you overcome that?

**Dr GIBBERD:** I am involved in a study with the Cancer Council to compare survival of cancer patients after diagnosis and to see if there is a rural-urban difference. I did one in Finland; I think it was only melanoma and prostate cancer where there was a rural-urban difference; there was not otherwise.

**CHAIR:** Was there equal access to all the modalities?

**Dr GIBBERD:** Not in Finland. You are way up north in the Arctic Circle and people do not have access to the same facilities. Whether they move to a teaching hospital area and get their treatment there and then move back, I do not know. But I would think in the same sense that if we looked at that in New South Wales I would not expect to see a large variation in survival between rural and urban. Basically, it is a disease and if you have it, it is up to you to decide whether to get all the chemotherapy, radiotherapy and surgery you can get at a teaching hospital or to have whatever is available at Bourke or whatever. I suspect that most people elect to get the best treatment so they move. Some people want to stay where they live and take what is available. In principle they would have the worst survival and we should be able to spot it, but I think there must be very few.

**CHAIR:** A surgeon says to a woman with breast cancer, for example, that these are the things he reckons she should have on the best information the surgeon has—the lump removed followed by this chemotherapy, followed by this radiotherapy. The woman says that she will not do radiotherapy. The surgeon then says that it is best to have the whole breast off and have some chemotherapy. When they make those different choices, that is on availability or access or whatever. If there is no difference, surely that should be shown up in whether radiotherapy works or does not work for the different types of breast cancer and so on? I fell totally out of my depth in this area. When a woman is making choices with a surgeon on advice—everybody gets together and they all make this decision about whether they want to do one thing or another—is radiotherapy all that much better, with or without going to the trouble of travelling to Brisbane for a month? How do you sort that out?

**Dr GIBBERD:** It is not just cancer. A doctor may say that you should have angioplasty and maybe a coronary artery bypass graft [CABG] because you are panting a bit when you walk, or a child should have grommets in his ear because he has an ear infection. Every medical thing has a need to measure up to the benefits and the costs. In the past I think we have relied too much just on the individual surgeon or GP for advice and not been given the full details of the adverse event rates. One way to get the individual patient more involved is to say that the adverse event rate for grommets is such and such for the child, there is no evidence that it improves the child's learning ability or growth, it is not seen to be always relevant. Evidence based medicine says the following once you know all the information, you will be involved in the decision making.

The problem is that we do not have very good information for, say, cancer patients, although there is a student who is trying to write some software where you could put in your age, the cancer site, when you were diagnosed, how many years you have already survived and it provides the options you have and whether your life expectancy might be changed as a result of treatment. That might be a useful tool that clinicians could certainly use, and patients may even want to have access to it.

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** It seems to me that all the stuff from health is looking at the period of hospital stay and the various indicators of what is good and bad, with the bottom line seeming to be economic. If you said that with a cancer patient you might not get a result in terms of if you are using something like five years survival, you have to wait a long time before you get any results. If you are getting fairly good cure rates you might have to wait 10 years survival, by which time your underlying mortalities become a significant factor in terms of your input group.

**Dr GIBBERD:** Yes.

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** That data is not being fed back, is it? It seems to me that there is intensive data of what happens to people when they are in hospital which is the result in terms of the hospital admission, namely, did the patient die of deep vein thrombosis [DVT] or a wound infection or whatever. It does not say whether the patient got a good result five years later with speedy surgeons and day only admissions and God knows what else. Is anyone actually correlating the results of the procedures and feeding that information back in? At the moment, we are going to a norm that is an economic short-term norm rather than a long-term curative norm. Are we surveying the patients by asking, "Was it okay for you, mate? Was there immense strain on your family? Were there tremendous difficulties getting home and going to the dunny the day after?"

**Dr GIBBERD:** There are two points: A lot of the stuff we do is based on randomised control trials, so we rely on them to guide us on what our best practice is.

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** Them? Who is "them"?

**Dr GIBBERD:** The randomised control trials.

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** But I am asking about the collection of data.

**Dr GIBBERD:** We do a study and we show that chemotherapy for breast cancer at a specific stage seems to improve survival over five years. That is done by randomising 500 patients this way and 500 patients that way, and we follow the patients through. The randomised control trials are being done all the time.

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** They are being done consistently and for all patients in the same way? No, surely not!

**Dr GIBBERD:** Yes. If a patient is in a randomised control trial, there will be eligibility requirements to get into it and there will be randomisation between the placebo and the control group and so on.

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** We have a capture group at the hospital. It seems as though 100 per cent of hospital patients are being captured now.

**Dr GIBBERD:** If a patient is not in a randomised control trial, then the patient will get the treatment that either the patient or the doctor decides they want.

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** But even if you do get the treatment that the doctor wants, does anyone look at whether a person's hernia recurred in five years or whether the patient experienced pain because someone had stuck a needle through a nerve? Are we measuring outcomes apart from throughput outcomes?

**Dr GIBBERD:** It is easiest to do that with randomised control trials because you put a lot of money into following these people through and following through for five years. If it is just people coming into a hospital and you want to monitor everyone, that is a very expensive exercise so a randomised control trial is what is used to determine whether one treatment is better than another. With cancer, there is a lot of them: there are a lot of breast cancer ones, and colon cancer ones. People who are going in for treatment of laparoscopic colon cancer in principle have to be in a trial because no-one knows whether the treatment is equivalent to an open procedure. In fact, if a surgeon says, "I want to do your colon cancer laparoscopically", the patient had better make sure that he or she gets into a trial because the National Health and Medical Research Council [NHMRC] guidelines state that that is what we are supposed to do. We do not know how effective that is.

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** No.

**CHAIR:** When you look at all those clinical indicators which the department now uses, there are 60 of them. How many of those do you think go to the issue of quality and how many of them go to the issue of economics?

**Dr GIBBERD:** Obviously, if you reduce waste and rework and produce better quality for the patient, then you save money. Let us forget those moneys saved. All that the indicators are meant to do is measure the care given to the patient in terms of the best quality. In the case of overutilisation, one could argue that the patient has been exposed to risk in going to hospital and having a procedure and an anaesthetic and so on, and that is not the best care for the patient. In the case of grommets, there is doubtful evidence that it actually does anything for the child,

yet children have to be taken to hospital to have a procedure. That is not good care. You discussed the use of day only surgery, and we know that that reduces side effects.

**CHAIR:** On the grommet issue, say for example surgeon A admits 100 per cent of them as they are in the surgery. The hospital adds that 150 grommets that the surgeon has done to its pile and says that it has hit the 60 per cent target and that it is a good hospital. Another hospital says, "No, we have a few good rules about grommets. You have to have these conditions otherwise we not going to do it. If you want grommets done, just go to somebody else who just does it for nothing", and that hospital only has 20.

**Dr GIBBERD:** That is right. From a quality point of view, you may achieve better quality but look less efficient if only simple things such as day only are measured. But when we measure quality and efficiency, we also look at the admission rate. If there is a high admission rate or above the average, that would be an indication of a procedure that may be in-efficient.

**CHAIR:** Are there standard admission rates for large numbers of people in an area health service such as Northern Rivers, which is a decent size of approximately 200,000 or thereabouts? Would there be a standardised admission rate that you would expect to have in a population of that size?

**Dr GIBBERD:** Yes.

**CHAIR:** Is that expectation age weighted, sex weighted and all that sort of stuff—like an IVF program?

**Dr GIBBERD:** Yes.

**CHAIR:** So there are standardised admission rates and one would expect that anything above or beyond that rate would have to be examined?

**Dr GIBBERD:** You would have to look at it to see whether it is appropriate. It may turn out when you have investigated that it does appear to be appropriate and that there is a reason for it, in which case one would have to correct the rates for that factor.

**CHAIR:** When you drill down, would you then look at groups of diagnostic related groups [DRGs] such as grommets, gall bladders and heart failure?

**Dr GIBBERD:** The indicators we have are asthma, diabetes, AMI and coronary obstructive pulmonary disease. They are the medical ones. But we have tonsils, hysterectomies, grommets, knee, hip, as surgical procedures and then we have things like laparoscopic colectomies.

**CHAIR:** They are almost what one would call discretionary surgery, the first ones, are they not?

**Dr GIBBERD:** They are. We look at procedures such as tonsils or grommets which have regional variation and it is therefore possible that certain regions could have twice or three times the rate of anyone else. That is why they are selected but we also report on CABG and angioplasty as well, where you could argue that more is better because people's heart problems are being tackled. Again there is some elective element in there as well.

**CHAIR:** I assume that if one lined up all 60 indicators for an individual area, they might be up and down. Is there a way of making that statistically different where a couple of peaks point out and a couple of troughs point out? Is that something that you can do?

**Dr GIBBERD:** That is what we do. Where it is statistically significant with three, although usually it is six, standard deviations, plus the important issue of costs—if it is 100 excess admissions, it could be argued that the public needs to know why—and if those two criteria are satisfied, the Area Health Service, in principle, should respond, "Okay, we will investigate the reasons for that and report on it."

**CHAIR:** Would you also report on, say, the number of people waiting for elective surgery of various types?

**Dr GIBBERD:** That is reported.

**CHAIR:** No, but in your lead table of quality.

**Dr GIBBERD:** One of the things that is always pointed out to us is that where they are high, the waiting list usually is high, and where they are low, the waiting list usually is low. There is an unusual relationship between waiting list and utilisation. I do not understand why. One would think that would be the other way round.

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** If the waiting list is high, the operation list rate is high.

**Dr GIBBERD:** They tend to be high utilisers. It is very odd.

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** If the delivery was constant, one would expect that.

**Dr GIBBERD:** You could argue that if you have twice as many gynaecologists as you wanted in North Sydney and they did twice as many hysterectomies—which is not the case—then they should clear the waiting list, but they will have a higher rate because there are too many surgeons. They clear the waiting list so they should have a low waiting list but in fact if they have twice as many gynaecologists as elsewhere, some of the general practitioners [GPs] are referring everyone to them, which is why the waiting list is high.

**CHAIR:** Although the numbers waiting are higher, their churn rates are high?

**Dr GIBBERD:** Yes, they are getting rid of them at a fast rate. But why are they being added to?

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** They accept the norms of the threshold, if you like.

**CHAIR:** They are lovely people and that is why people keep coming back!

**Dr GIBBERD:** I do not know. In the workshops I often suggest that it is the referral patterns of the GPs who tend to refer their patients to the best surgeon who tends to operate. Therefore the list is high and there is a lot of work, but no-one has done a study to show that that is the case. It would appear to me that a lot of the variation could be at the GP level and that therefore the GP Division should be involved in this quality exercise of the Health Areas.

**CHAIR:** Where do you report, not the lead table, but the variation and the differences that you notice? I assume that they are about 18 months behind real time, are they? Where do you report this?

**Dr GIBBERD:** We have been doing it for 20 years and you saw the one for Northern Rivers. You got an abbreviated one and I did not bring one down. But they get a report on the first phase indicators which is 60 pages long and it reports each indicator in different ways: time trends over ten years; how they stand with respect to the rest of the State; observe and expected; and broken down by local government areas to indicate the variation within a local government area. As each indicator comes out we flag from those which ones they should possibly be reviewed with the objective that each area will tackle three of them—the most important ones—and try to find out the root causes of the variation. We would try to do an intervention and see if it works.

**CHAIR:** The last one you would have produced would have been for the 1998-99 year.

**Dr GIBBERD:** Yes.

**CHAIR:** Have you done that for all the country area health services? That would look backwards but would make recommendations forward. I wonder if it is possible to obtain that? Are they secret, or are they available? Who would we have to approach to get those?

**Dr GIBBERD:** They are not as secret as they used to be. We are actually becoming much more open and at least 60 copies of reports for each area are circulated to staff who come along and listen.

**CHAIR:** We would not want to get one that fell off the back of a truck.

**Dr GIBBERD:** You could ask for all 17 from the 17 areas and I am sure that Maureen Robinson would be happy to give you all 17 copies.

**CHAIR:** We are only interested in seven area health services for our study.

**Dr GIBBERD:** That is right. We did summarise some of them for the department, showing that there was not in fact a lot of common issues that stood out in the seven rural areas and that, in practice, they were no different from the city areas. If there is variation, it never splits nicely between rural and urban. It splits in most peculiar ways. One just has to cross the Sydney Harbour Bridge to get some of the biggest variations.

**CHAIR:** Have you compared this with other places, for example Switzerland, Sweden, Washington DC or Quebec? New South Wales has seven million people.

**Dr GIBBERD:** No, I have not actively done that. I know there are studies in America showing large variations in places in Boston. The UK has also looked at variations. I think it would be possible to see whether our variations are greater than theirs or whether that would be important. We did a study for Queensland and showed that there was variation there as well.

**CHAIR:** The quality that we are going to look at is only quality comparative between, say, Lismore and Dubbo. We might be talking about a two per cent change between Lismore and Dubbo versus 50 per cent better than Washington, 30 per cent better than Switzerland, and 40 per cent better than Sweden or worse. We are talking in the two per cent line here whereas in the big wide world it might be different. How do we find out? Is there any way to find that out, or is that just a silly thing to try to bother with?

**Dr GIBBERD:** I have not tried to put a lot of effort into that but I know that the OECD does put comparative statistics out for the top 30 countries. They are very crude statistics and are very misleading.

**CHAIR:** The French are the best.

**Dr GIBBERD:** We count day only patients as admissions but America does not. We have admission rates of 250 per thousand but they have 150 but that is because anything that is in the day only category is counted as an outpatient and not as an admission, so they have to have an overnight stay. There are some problems there in the way the data are put together.

**CHAIR:** The department recently changed the classification of admissions for chemotherapy from admissions to outpatients. Do you know why that happened?

**Dr GIBBERD:** I do not know what the current definition is but chemotherapy, like dialysis and radiotherapy previously, was not collected uniformly. If you go back to the 1980s you will find that some hospitals never reported dialysis and others did. That distorted the figures so dialysis was classified as inpatient. Chemotherapy is also highly variable: Some people count as outpatients and some count as inpatients.

**CHAIR:** Is that because most cases have been corporatised, moved off site and charged to the Commonwealth?

**Dr GIBBERD:** It is often designed to manipulate the figures. St Vincent's used to count AIDS patients who came in for an injection. They would be in hospital for only an hour but they would be counted as inpatients. We always had to pull them out of the data. Another hospital used to include as inpatients rehab people who came in for a game of pool. We had to pull them out of the data as well. The data is often distorted.

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** I guess that is why Australia had the highest admission rates in the world.

**Dr GIBBERD:** Chemotherapy is highly variable.

**CHAIR:** It used to be inpatient. The Minister told us during estimates committee hearings that there had been fewer acute overnight admissions to hospitals in New South Wales—and day- onlys are counted with the admissions. He said that some things are no longer counted, such as radiotherapy. Part of the reason is that some chemotherapy cases have been transferred and the Commonwealth is now hit for the bill. The Commonwealth is happy to do that. It is a co-operative arrangement; I am not saying that it is wrong, a trick or some foolery. That is one factor that has changed and perhaps the funding model is responsible. When you compare admission rates you are obviously sensitive to that area, and the information would then be corrected to make it as comparable as possible.

**Dr GIBBERD:** In the resource allocation formula or the resource distribution formula we pull out chemotherapy, radiotherapy and dialysis when calculating the need index because of their variable nature.

**CHAIR:** That must be fascinating work because it would drive much of the argument about how to fund and how to test.

**Dr GIBBERD:** One of the things about population-based funding is that we apply State rates to the population not actual rates. They could distort the data any way they like but, because we apply the State rates to the population, they receive a set amount of money adjusted for the need index. That is another advantage of not using throughput funding where there is every incentive to count anyone who walks past the door.

Another point that might be useful is that New South Wales could introduce into medical schools some quality courses for graduate and undergraduate medical students. It is amazing that we do not teach medical students in Australia anything about quality. We started to do that in Newcastle this year, and the attitude is quite bizarre. Some students think it is really important stuff while others think, "Of course we are perfect; what is the problem?"

**The Hon. RON DYER:** Do they think they are perfect as medical students?

**Dr GIBBERD:** Yes, by the time I get to see them in fourth or fifth year. They graduate at the end of fifth year. They started as good left-wing students at Newcastle but they change.

**The Hon. RON DYER:** I did not realise that they attained deity status so early.

**Dr GIBBERD:** In order to shift the quality agenda in New South Wales in the long term, the medical schools should be made to show students what the tools of quality are: continuous quality improvement, what clinical indicators can tell them and how they can monitor their own performance. Students are not taught how to do that at present.

**CHAIR:** Do surgeons, physicians or nurses have the tools to monitor their performances? I assume it would be harder for nurses to do that.

**Dr GIBBERD:** You follow up your patients. You might decide that you want to see a patient a month after surgery, you record what has happened, you keep a database and look for trends. You might ask other doctors to do the same and then compare results. If you want to look at bypass surgery rates, for example, you can see what other hospitals are doing in Australia and compare your rate to theirs. That information is published.

**CHAIR:** In which document?

**Dr GIBBERD:** The Australian Council on Healthcare Standards reports 185 clinical indicators for Australian hospitals. I do not know whether I have been of any assistance to the Committee, but I assure you that it is a complex problem.

**CHAIR:** You have certainly helped me.

**The Hon. DOUG MOPPETT:** Part of the difficulty is that traditionally doctors have been treated like great painters: you do not interfere. They have been trained, they have a gift and you do not apply normal criteria to them. On the other hand, while they uphold that view, they also know that they can make more money—that has motivated them at least in the past 30 or 40 years—if they do their job more efficiently. So, while doctors do not like an external administrator to come in and apply a matrix and say, "You must fit within this model", there is a drive within the profession to maximise their income-earning potential through efficiency. What do you think will be the most effective method? Do you think the Committee should recommend a more regulatory process whereby people are put into an employment-type category or is it a matter of encouraging doctors to develop their profession, whether for aesthetic reasons or through the drive to increase their revenues?

**Dr GIBBERD:** I have thought about this many times and I feel that you need a comprehensive approach. First, you must involve the colleges because they are very reactionary at the moment. When we showed them the variations and said, "What are you doing about it?", the obstetricians and gynaecologists said, "It is against our constitution to change someone's clinical practice". This related to someone who was doing 100 per cent episiotomies for normal deliveries when the recommended rate is now about 8 per cent. Some groups have their own protocol. We say to colleges, "You should be able to tell that doctor that that is not best practice and this is how you do it." However, they will have to be encouraged to become more proactive.

At the same time, I think regulation is quite important. In America they are now legislating that any errors made must be reported to the patient immediately. Reasons must be given and an explanation provided as to how they will prevent the error happening again. Such legislation is already in place in New York and Boston, where errors are documented. Legislation such as that has also been introduced elsewhere overseas. I am not advocating that approach here, but perhaps we need some sort of legislation regarding clinical governance and the need to accredit surgeons every year through the clinical governance system. We may be heading towards the compulsory reporting to patients of errors in medicine.

**CHAIR:** Both Boston and New York report everything to the department but, in both cases, the department does absolutely nothing about it. There is no feedback loop or assessment of why it has gone wrong, what impact it has had and how to avoid it in the future. This is what the National Institute of Clinical Excellence in Britain did.

**Dr GIBBERD:** They are working on that. According to a telephone conference, they admit that they have failed to analyse the data well, but they are now contracting out to people to analyse the data better and to report back on how it could be used to improve the patient outcomes. It is true that the data has not been used cleverly.

**CHAIR:** The Minister has made that move here too. The torts legislation has been changed and the Minister will require insurance companies to report all incidents. However, the insurance companies will require the doctors to report all incidents as a condition of their being registered. That compulsory reporting has been introduced because of the Minister's recent change to litigation legislation. However, I am not certain whether we will do anything with the information when we receive it because that will cost real money.

**Dr GIBBERD:** It is likely that if you had that data at least you could report on the most common errors and then work on them. When I conducted the adverse events study we found about 2,300 adverse events. I thought, "That's easy, I'll just tell everyone about the most important one and then they can fix it." However, it turned out to be highly diffuse; nothing really stood out. They included a lack of prophylactic antibiotics, DVT prophylaxis, came out of elective surgery as being two areas where there was a failure to follow the protocol. Hospitals are now being told that they should introduce these protocols. If I had the data set of all errors—infection rates and so on—I could use that data to say, "We have an infection rate of 6 per cent but we know that if you use antibiotics prophylactically it should be 0.5 per cent." We would then have the authority to ensure that hospitals introduced a standard protocol. I think we would be able to use the data effectively to reduce some of the errors.

**The Hon. Dr ARTHUR CHESTERFIELD-EVANS:** I am sure that is correct.

**CHAIR:** Thank you for appearing before the Committee today. We appreciate it very much.

**(The witness withdrew)**

**(The Committee adjourned at 4.42 p.m.)**