## REPORT ON PROCEEDINGS BEFORE

## PUBLIC ACCOUNTS COMMITTEE (PAC)

## INQUIRY INTO THE MANAGEMENT OF HEALTH CARE DELIVERY IN NSW

At Macquarie Room, Parliament House, Sydney, on Friday 9 March 2018

The Committee met at 10:00am

## **PRESENT**

Mr B. Notley-Smith (Chair)

Mr S. Bromhead Mr L. Evans Mr M. Taylor (Deputy Chair)

**The CHAIR:** Good morning and thank you for attending the third hearing of the Public Accounts Committee Inquiry into the Management of Health Care Delivery in NSW. This hearing follows earlier hearings conducted last year and will mark the end of the formal evidence-gathering phase of this inquiry. As well as today's focus on mental health services, the hearing will provide us with an opportunity to take further evidence from the Ministry of Health before the Committee prepares its report on the inquiry.

Prior to the commencement of proceedings, I remind everyone to switch off their mobile phones as they can interfere with the Hansard recording equipment. For the benefit of the gallery, I note that the Committee has resolved to authorise the media to broadcast sound and video excerpts of the public proceedings. Copies of the guidelines governing the coverage of the proceedings are available.

RICHARD DAY, Director, Clinical Pharmacology and Toxicology, St Vincent's Hospital, Sydney, affirmed and examined

**Professor DAY:** I am also a professor of clinical pharmacology at UNSW Medicine.

**The CHAIR:** Before we proceed do you have any questions concerning the procedural information sent to you in relation to witnesses appearing before the Committee?

Professor DAY: No.

The CHAIR: Would you like to make an opening statement?

**Professor DAY:** Yes. Thanks for the opportunity to address the Committee, which I welcome. I have provided a summary of points. I will not go through them all because there are quite a few, but I thought that the first thing to note was the patient experience being a very important part of what happens to people, particularly if their responses to medicines are a bit unusual. In the document I have given personal examples in italics to indicate how this impinged upon me. One of the first examples was in a public consultation some years ago a middle-aged male patient who was very normal in all respects was repeatedly turning up to emergency departments with a painful condition but had a serious reaction to morphine injections. Each time this was discounted because it was unusual and they said, "It can't be the case that you have a reaction", and he got another injection. It was very distressing and as he told us he was crying. This made a big impact. He was just an ordinary citizen like most of us here.

This is a very similar story to what I read in the "Medication and Mental Illness: Perspectives" paper, which I think is one of the fundamental papers that you are looking at here. I have been asked to address two matters. The first is about pharmacogenetics and how much of a contributor to adverse reactions that might be. The second is to talk about adverse events generally to medicines and the reactions. I will not spend a lot of time on it but I have collected some useful points about medication errors. I think it is simple to say that it is a very big problem. To give you one idea, the World Health Organization has just announced that Medication Without Harm is their major patient safety initiative as announced this year because of the cost to people. The cost internationally is calculated to be \$42 billion annually. That is 1 per cent of global health expenditure just on the cost side; forget the matters for the individuals. In our own hospitals the rate of admissions for medication errors is very high and it is very hard to reduce it. On average, it is about 2 per cent to 3 per cent but the older you get with more comorbidities that number increases. In some studies in Australia up to almost 40 per cent of reasons for admission is something to do with medicines.

One of the big problems I highlight is to understand what medicines someone is actually taking as a key point. Sometimes that is called medication reconciliation. It is much harder with a mental illness because of the difficulties that everyone has, particularly the patients, in being on top of that and being able to communicate with everyone they need to. In fact, this has been worked on federally and with the States with a working party for reducing adverse medication events in mental health. Our State is part of that and I am a member of that group trying to deal with it. However, it is very risky—particularly when people are moving between healthcare facilities, which people do. It is also the reason that a lot of adverse events happen. Why people are injured, falling over, breaking their hips, being oversedated is often a result of medications. I give an example in the document that I see often. Here is a patient coming in who is taking two drugs with different names, both antidepressants but both the same antidepressant. It is a trade name issue. He did not know. It is not surprising this person is falling over and being at risk of a serious adverse event.

The other big hazard for people with mental illness is the comorbidities. It is much more common to have diabetes, hypertension and related metabolic problems because it is harder to look after their general health matters and some of the drugs used actually induce these problems—that is, they cause a tendency to eat more. There is also a hazard of what is called the prescribing cascade if something goes wrong. I give an example of an elderly person who has been taking a drug for dementia and it has effects on their bladder and leads to retention. They are then put on a drug to treat the bladder problem that actually was drug induced and there is this chain of drug two, drug three, drug four because the first problem is not identified as an adverse reaction.

I will move on to commend to the Committee a very valuable framework for thinking about medications and getting the best and safest result called the Quality Use of Medicines [QUM] framework. It is in fact the centrepiece of Australia's National Medicines Policy. It is based on behaviour change and communication and people consulting, but it has three very simple components. They are so simple that you would think, "This is so obvious, why do we need to write them down?" In short, the first one is selecting management options wisely. That sounds sort of motherhood, but it also includes not using medicines and checking medicines. The second one is if a medicine is to be used it is the right one. That requires knowledge,

discussion and looking at the patient. The third is when you have selected a medicine, use it properly—that is, get the dose right, look out for adverse events and monitor it.

Those are simple things. I say to my medical students, "Apply the QUM filter to every patient you see as you're a learner and see if the patient passes." More often than not, those simple three steps are not followed. That is just one example in our National Medicines Policy, which does include complimentary medicines. A common drug used in mental illness is St John's wort, which causes drug interactions and has its own toxicities. Simply knowing what the patient is taking and advising on that often does not happen, which is a problem. One key tenet in the Quality Use of Medicines is that we are all different and no-one—for most drugs—is satisfied with a single dose, so we have to vary the dose and individualise it based on a person's age, gender, body weight and ethnicity. We have always known that and we have and should do it—and should do it better. But the new part of this is pharmacogenetics.

On page 5 of the handout I gave to the Committee, there is a graph showing the variation in drug response when giving the same dose of a drug to a whole lot of people to reduce blood sugar. The distribution on the right side of the graph shows that some people have a big drop in blood sugar, but the left side of the graph shows that some people have none. One dose does not fit all and that is a key problem. We know that the concentration of the drug at the site of action is important and varies. One of the reasons for that is—now, I get to what the Committee asked me about—pharmacogenetics. On page 7 of the handout there a picture of a genome and a strand of DNA and the order of bases in a section of DNA. There is also a comparison of two groups of people. The picture simply shows that if one of the base pairs is different, the three base pairs that make up a gene will potentially produce a different product—a different protein.

Proteins are what do all the work in the body. They are the enzymes that get rid of drugs, help with the transport of drugs and so on. There can be major differences in the ability of different bodies to deal with drugs. There are two broad ways that a drug and a body interact. The first way that they interact is what the body does to the drug. When a person takes a drug, it has to be absorbed, get into the blood and be eliminated. That is what the body does to the drug, which is called pharmacokinetics. Pharmacokinetics can be affected by the proteins that come from genes because the metabolism getting rid of the drug is controlled by these proteins. The second way in which the body and drug interact is called pharmacodynamics, which is what the drug does to the body. That is also affected by genes affecting proteins that respond to the drug.

We now know that there is a lot of variation in both of those areas and I have drawn a picture to demonstrate that. My own person example of this is that the first time I saw this was in 1970, when we were running simple drug tests in medical students—normal volunteers—on an antidepressant. We gave one dose of the drug to each of the students. One of the students went to sleep, his mother had to come to pick him up and we could not wake him up. That happened during a time when this area of science was not known. But we quickly found out that the student was missing the cytochrome enzyme because his genes were different. That is essentially the story, which has become very interesting and important.

On the left side of page 8 is a graph entitled "Nortriptyline", which is an older but commonly used antidepressant. Nortriptyline is removed from the body by the same protein as the drug that the medical students took: 2D6 protein. The graph on page 8 shows the amount of drug in the blood of the different people the drug was given to—everyone was given the same dose. The bloke represented at the top of the graph with "0" has no active enzymes—his gene does not make the active enzyme. The next bloke down on the graph has one enzyme. The bloke—I should not say bloke, but person—with two enzymes is an ordinary citizen. They represent almost 90 per cent of us, while 10 per cent are in the other camp. Next on the graph is a person who has an extra copy of the gene—they have a greater amount of 2D6 enzymes. Then there is a person with 13 copies of the one gene. That happens through genetic variation.

One can imagine what happens to the antidepressant in the body of someone with 13 copies of the gene—it just goes like a puff of smoke. The person might as well take a sugar tablet—it is not going to work. There is a range of variation from far too much to far too little. It is not happening in everyone obviously, but the issue extends across a number of key genes and proteins that handle drugs. We can now measure at least four that are very specific for medicine. It is reasonably easy to understand, and I can talk more about that. I want to finish my opening comment by referring to the table on page 9, which describes "Type A" and "Type B" adverse drug reactions. Before, I was talking about Type A reactions, which are related to how much drug gets in and out of the body

We know a lot about Type A reactions through all sorts of measures. Type B adverse effects, which are shown on the right of the graph, are described as bizarre drug reactions. There is a horrible photo on the bottom of the page, and I apologise if it disturbs anyone. The photo depicts a fairly uncommon but well-described, serious and previously unpredictable adverse drug reaction called Stevens-Johnson syndrome. The syndrome is

identifiable, particularly in some ethnic groups, through a test for a gene that we do. The syndrome occurs also in some of the drugs we use in mental illness. That is all I have to say in my opening comments. I made a few comments at the end that I thought might be helpful in terms of media attention. I thank the Committee for listening to my remarks.

**The CHAIR:** I could listen all day—it is absolutely fascinating. Could we test every prescribed drug? Could every patient who is going to be prescribed a particular drug be tested for potential adverse reactions? Could a table like the one on page 8, which pertains to nortriptyline, be produced for the respective responding genes for any drug?

**Professor DAY:** Yes, we pretty much know how a drug is handled by the body by the time it is registered. For example, we know whether it is removed from the body by the kidney or liver. In fact, for modern drugs, we know which genes and enzymes do the job. That is all done in test tubes before the drug is registered. Increasingly, it is important to know the difference between too much and too little, for example, and that information is increasingly available and is starting to be included in the product information in the Monthly Index of Medical Specialities [MIMS]. That inclusion of information is starting to occur and advice is given that it would be a good idea to do the test. But it is not a good idea to test for every drug at this point—it is too much work and there is not enough return for the exercise.

There are some standout situations where we should test. For example, we know that Chinese people—and we have a lot of Chinese people in Australia—are more at risk for the horrible disorder depicted in the picture on page 9 with some drugs. One of them is a drug we use for mood disorders—carbamazepine. The test really should be done to check if someone has the gene and marker and, if the person does, the doctor should see if there is an alternative drug. That does apply to an increasing number of drugs. We are still accumulating data, looking at populations and deciding when it is the right time to test. I would not say it is right for every drug at this point, but it certainly is for quite a lot of them.

The cost of getting the panel of key enzymes done is dropping. In fact, you can get your whole genome done now. It is quicker and cheaper, so on and so forth. That is moving very fast. There are places around the world where pre-emptively that panel or even the whole genome is done. It is included in the person's electronic medical record and used as a decision support tool, so when you prescribe a drug that is affected by this it might register and you say, "Maybe I had better pick another one." Nowhere in our country is that the case yet. I think it is premature that that is the case but we are moving towards that scenario quite quickly.

**The CHAIR:** Would you expect the clinical outcomes to outweigh the costs eventually?

**Professor DAY:** In those particular situations there are definitely some of those outcomes. Probably the second very important point—and I have probably alluded to this in some of the examples—is when the reaction to a drug, particularly in the area of mental illness, seems peculiar or it is repeated, and there is no effect or there is a strange effect or there is too much effect that is just not expected. That is the time when help is needed—where people are just continuing the same pattern or persons are roaming around trying to find answers themselves. I think that is a pity and we see that too much. That is where this sort of knowledge and expertise cannot be all over the place; it ought to be available and people should know how to get help. That comes down to a good general approach—listening to patients, making sure that you value what you hear and trying to understand it.

**The CHAIR:** In an earlier hearing the Committee was told a horror story by one patient who had an adverse reaction. That is why you are here. You have been identified as one of the leaders, if not the leader, in the country in this field of study. What is your experience in New South Wales in the prescription of medications for mental illness?

**Professor DAY:** I am not aware that we are in front of, or particularly different to, anywhere else in our country in our general standard of what we are doing. Is there room for improvement? Yes. I hope the general approach that I have talked about—by the way, it is not just in mental illness when it comes to therapeutics, it is broad. I think it is more problematic in mental illness because of the particular difficulties people with mental illness have in their communications, comorbidities and the range of drugs they take. Probably everywhere in the country could and should do better. When patients have adverse, unexplained reactions repetitively more help is called for.

Sometimes it is very challenging. In those cases there is now the facility to learn more—we should be learning from all of these experiences—because of the genetic opportunities we have to actually look at someone who is having a particularly challenging time and ask, "Why is it so?". Perhaps with full genomes and then using the world experience, because the databases are outstanding and there is a very good consortium around the globe that we are in contact with who are talking all the time about which of these findings ought to

be brought into clinical use. But, going to the Chair's point, not every drug now but increasingly adding to what should be on the menu, if you like. One of our other challenges is how to make that accessible across our big and diverse health system. I think probably the biggest contribution would be if the sensitivity of everyone involved in unusual situations is acted on better than it has been. I would say that is an international problem.

**The CHAIR:** Let us narrow our focus to psychiatry. So this is a cultural issue within the field of psychiatry that this is something new. Are they not accepting of it?

**Professor DAY:** I would not say that. I would say that probably right across medicine it has been around for a while but the question I think in clinicians' minds is: How helpful is this to my day-to-day practice? That has been challenging because a response to a drug is multifactorial and this can be a big part or a smaller part. For me, the issue is to figure out what the value is for my patient and that comes down to evidence and being convinced. As the Committee might know, unfortunately even quite strong evidence from really high-class research takes a while to get into practice, which is a pity but it is a perennial challenge. I would not single out any particular branch of medicine because I think it is pretty much across the board.

But I do think the cultural bit that I would focus on is valuing what you hear and see in front of you as a clinician to actually act on it if it is off the scale to a degree. The sorts of patients I have been involved with, probably because of my areas and so on, are often two, three or four times through various areas because it is obscure. In that case, and this happens, we send them off to the clinical genomics unit to see what emerges—it is like fishing in a way, unfortunately. We can then use that in a global way and that is very valuable. I think having that resource to actually consult and the expertise to do something about it is something that we could recommend.

**The CHAIR:** Let us take the example of a mental health facility where a patient is being held against his or her will because of challenging behaviours. The patient believes they are experiencing an adverse reaction but the clinician who is looking after them does not accept that—they believe it is part of that patient's disorder. How does a clinician handle that? How do they oversight that?

**Professor DAY:** I think that is well put. That is a good summary of a dilemma. There is no doubt—and I am not a psychiatrist so I do not presume to be speaking first-hand of the difficulty that the Chair has just put to me—that the symptoms could be related to a drug that sometimes can be identical to the symptoms of the disorder. One simple example, which is not as serious as the one the Chair has put to me, is over the group called the benzodiazepines. We know they are overused in the general population, despite everyone's efforts to use less of them. Why? It is because people are being treated for problems with sleeping and/or anxiety as another indication. This would be quite common.

Then we say, "Let's stop that, gradually reduce the dose." That is the sort of evidence-based approach to not taking a drug that has adverse effects such as falls and cognitive blunting and various other things. And, of course, as soon as that happens the anxiety returns, and that was the reason it was prescribed in the first place—there is this sort of loop. So there are symptoms that can be due to the illness itself and the medicines. I think asking the question is the key thing, and I am sure lots of psychiatrists do that. How do you deal with that? I think making it clear at a simple level, if possible, you would stop the medicine and see what happened. That might be easier to say, because if someone is seriously ill and needs to be helped with, say, mania, it is easier said than done. But there are often alternatives.

So there are ways of getting at it before you start postulating more obscure things again, and it becomes difficult because people's experiences are the most powerful and the most influential on them, and the perceptions are very powerful as well. Sorting all that out is incredibly difficult. I think it is important to make it as clear as possible and use evidence like stopping the drug and reducing the dose and simple things, which I am sure happen most of the time, to decide one way or the other is it the drug, is it the problem of the drugs being useful? In rare circumstances in some of the patients I have seen, for example, there is multiple drug hypersensitivity. When you look that up there is not a big section in the book or the literature on this and we do not really understand it, but it is a defined, described area of medicine, and some people end up in that corner.

It is incredibly difficult because we still do not know the mechanism for the reactions to a suite of drugs, and that seems to be the relationship that there are drugs and there are these reactions. But again, disentangling that from, say, a background of psychiatric symptoms is really challenging. I think it needs listening, it needs an open mind, it needs testing, it needs a lot of communication, and sometimes there is an opportunity to go on and do more sophisticated things to really start to say: What about all those multiple sensitivity people? What are the common threads in their genome, and can we start to understand that better? So I think, going on, it is sorts of levels of activity to come to the best conclusion. But I think possibly we have overlooked the patient experience at times, when we ought to do more.

**The CHAIR:** Were it possible to enshrine protocols around these things, it takes many, many years before there is consensus to allow that protocol to be written.

**Professor DAY:** Absolutely. I think once there is pretty good evidence, and in some of the examples here there is good evidence, that can be protocolised and if it does not happen that is a medication error—we have got a big enough problem with them. But to get to a protocolised state—and this is a good example—a lot of testing is going on where you say: Do we really need to do it all? For example, you can go to your local special pharmacy and get all your drug metabolising genes measured, but at a huge expense. Is that a useful thing to do? In isolation I would say no, but in the context that we have discussed, yes.

**Mr MARK TAYLOR:** I get the sense that from your experience there has obviously been a change over the past 20 years or so with people moving away from a primary general practitioner [GP] and now seeking multiple opinions from a variety of sources. Is that assumption correct?

**Professor DAY:** I think that is right. In a way, a lot of people have downgraded the general practitioner, which I think is a pity because a good generalist would help a lot with some of the things I have been discussing. We do have situations where there is multiple specialists' input.

**Mr MARK TAYLOR:** From that, of course, information sharing then becomes key. From your experience, are there issues around the non-sharing of that data or are there opportunities to share that data that you would like to comment on?

**Professor DAY:** I think the data, with proper protections, should be shared, particularly clinical data and what has been done and what is being proposed. The general attitude is to share and communicate, but it is not good enough. We are hamstrung a bit by multiple systems. We are all trying to have an electronic medical record and we are all trying to have our own health record online that everyone can access, and that has been hard. But that will come, like it is across most industries, and that is going to be incredibly helpful. There are so many errors and problems related to just not having information tracking with a patient through the various places that they go. I think our ability to communicate with each other is expected. I think it is pretty good—at least with physicians, but I am bit biased there; we write letters about everything. But it is a problem because sometimes the left hand does not know what the right hand is doing, that is true.

**Mr MARK TAYLOR:** When you say it is hard, do you say it is more about waiting for technology advancement or resourcing, or is there a culture issue of non-sharing, or is there legislative impediment to privacy or anything like that?

**Professor DAY:** No. I think it is basically the ease of doing it, the cost—this is in the hospitals—and also, I think, in practice the systems are emerging. It is getting better but it is really complicated and there are not enough resources, compared to the banking system or something like that where it is obvious and very sleek. The health system is much more complex, of course, and it is much more expensive, and we struggle to fund it properly, I think.

Mr STEPHEN BROMHEAD: You spoke about quality use of medicines. You have people who go to their GPs and their specialists who prescribe all sorts of things for the various ailments, but without doing a review of what they are already on and without saying "Stop taking that one because I'm giving you this new one"—so they are taking a whole lot of medication—they are admitted to a unit with a form of acute psychosis or they are on a number of medications that they do not tell the admission doctor or psychiatrist about, who then prescribes something that adds on to what they have already got and so you have that acute psychosis or some form of reaction. You spoke about when you lecture your students you talk about the Quality Use of Medicines. Is that happening right across the board, because we have just unleashed in our public system a fantastic statistic—990-something new doctors? So you are doing it, but is that happening in every other university across the country?

**Professor DAY:** Broadly speaking, that is what we are trying to do. How well it happens is a good question. One interesting thing is that in the United Kingdom there is now a prescribing skills assessment barrier to going into practice and it is meant to put in front of new graduates a whole raft of scenarios that are quite testing; in fact, it was set up by all the med schools in the UK. Now a number of us in Australia are starting to do that, because in the UK it is actually a barrier. I have run my first final year of UNSW graduates in medicine through this last year for the first time. It is very searching; it is meant to be an end point of all the stuff we have been talking about and so on.

Increasingly, we know that prescribing and drugs is a big source of difficulty, that we need to work harder to ensure that graduates reach a standard. I personally think that test—which is more the actual skills of what is wrong and what is the right drug and all that stuff—is only the first bit. I think the quality use of medicines is another level up, which is this bit about the importance of communicating, listening, behaviour

change and those important things. I go to extraordinary lengths at my place to do this. I do not know how successful I am, but at every level through the medical course much more of that would be good. I guess that is what I try to do. Other schools do a pretty competent job but we are still not getting the quality that everyone wants because of all these problems.

**Mr STEPHEN BROMHEAD:** For doctors' training, is there anything that you would recommend that should be rolled out in all medical faculties? This is your chance to make a difference.

Professor DAY: There should be a lot more of me. I am a clinical pharmacologist.

Mr STEPHEN BROMHEAD: We are talking about cloning you.

**Professor DAY:** You do not have to clone me; my wife would object. Seriously, it is a specialty in medicine. We are incredibly thin on the ground. We are not the only ones who can talk about this, I do not want to give you that impression, but I think that our prime focus is, as it should be, quality use of medicines—being expert in the matters we are talking about, and a range of other stuff. The University of New South Wales system, there are about four teaching hospitals and four country hospitals. How many clinical pharmacologists in the Faculty of Medicine are communicating? One. That is me, and my hospital. In teaching hospitals across Sydney, how many clinical pharmacologists? Not enough.

There are some without any, for example, Liverpool—a huge place, part of our system. It has been trying for years. This is not smart, for a whole lot of reasons. We have tried very hard to do something about this. To have a bigger focus on education and advice and helping other doctors in the community I think would be a good idea. If you said: What is the biggest thing? I would go for that first up, but I am very biased. I understand that. It is obvious to me really.

Mr LEE EVANS: I am a thalidomide victim, so I understand the pharmaceutical issues in medicine. Mental patients entering hospitals are prescribed drugs by general practitioners, specialists and other health professionals—and this comes back to what Mr Bromhead is saying. A full review of what every patient entering a mental unit has been prescribed and what cross-contamination may be occurring could be one way of helping these people. This is not related, but my mother was a dementia patient. She was being treated with 15 pharmaceutical drugs until we moved her. After a review was conducted by her doctor, she was taking only Disprin. It is a case of layer upon layer upon layer of fixing issues that may or may not have been caused by another drug. More and more drugs are prescribed and toxicity then takes over. That was the issue in my mother's case: all these drugs, and her body was incapable of expelling them.

**Professor DAY:** I totally agree. I think that is a very good summary of a case. In fact, my late sister-in-law was in exactly that situation. It is very challenging because it is not my patient, it is someone else's: too many drugs, too many side effects, sitting doggo essentially from too many medicines. In fact, this extends beyond the psychiatric hospital; every patient coming into a hospital should have a medication reconciliation. In fact, it should happen coming in to see you as a physician or GP fairly regularly. There are Federal schemes to help that happen. There are pharmacists who can be brought in to do a review. There are issues around all that.

The simple matter of doing the review and finding out that there are two or three benzodiazepines and two opioids and a couple of antidepressants and some St John's wort, that should be identified and dealt with. We could make a big impact if the medication reconciliation was done properly on every patient. People are trying to do this and put in policies and so on and so forth, but it is not widely enough happening. It is very simple: Forget the genomics, just simply doing that would definitely make it better.

**Mr LEE EVANS:** Is that down at the GP level though?

**Professor DAY:** It is a GP matter as well. Sometimes it is a bit challenging for them because it is three or four specialists who prescribe this, this and this, and they feel a little anxious about stopping. But we ought to be doing something about that. Then the specialists should be communicating, and then maybe the community pharmacist—who is accredited to do this—should be brought in. There are ways of doing it, but we do not do it nearly enough. I think your example is very pertinent and it is too common.

**Mr LEE EVANS:** Again, is it the GP or is it the pharmacist? I know of examples where they are making medicine packs three or four times a day.

**Professor DAY:** The Webster-pak, for example.

**Mr LEE EVANS:** The pharmacist must know that maybe patients are taking things that are reacting against other things. Is it that communication to the GP that needs to be clarified?

**Professor DAY:** It is a big opportunity, which we do not make near enough use of. The pharmacists are well trained and some are very interested in doing that, but a lot could be doing a lot more in this matter of

review and medication reconciliation and asking questions—you are absolutely right. I think the pharmacy profession is trying to do that. Hospital pharmacists are a very valuable adjunct to everything we have talked about, but there are not enough of them and they are not there 24 hours a day, and matters like this. I think with the patients themselves and their families and carers, we can give them more help in terms of where you can go, where you can get good information, where you can get things checked.

There are some facilities. For example, there is what is called the NPS MedicineWise—I do not know if you have come across it. It is a big organisation, federally funded. All the things we are talking about are their stock-in-trade to try to help. They do help in lots of ways—for example, with ways of patients knowing what they are taking and what the issues are and how to talk to their doctors and so on. But I think you are right: Simple things requiring policies and putting them into action and some resources—definitely more resources—are needed for that simple approach.

**The CHAIR:** We have run over time, but I believe you have covered everything. The Committee may have some other questions of you.

Mr STEPHEN BROMHEAD: May I move for an extension of time? I am enjoying this.

**The CHAIR:** No, because we have other witnesses. I am enjoying it as well. The Committee may have some additional questions in writing, the replies to which will form part of your evidence and be made public. Would you be happy to provide a reply to any further questions within five days of receipt?

Professor DAY: Yes, I would.

**The CHAIR:** It has been incredibly interesting, and I thank you for your time today.

(The witness withdrew)

**JOHN ALLAN**, Associate Professor and President-Elect, Royal Australian and New Zealand College of Psychiatrists, affirmed and examined

**The CHAIR:** Do you have any questions about the procedural formalities?

Associate Professor ALLAN: No.

**The CHAIR:** Would you like to make an opening statement?

Associate Professor ALLAN: I am here today representing the Royal Australian and New Zealand College of Psychiatrists, which has about 6,000 members. It is a professional medical body. Of those 6,000 members, about 4,000 are fellows—that is, people who are fully qualified as psychiatrists—and about 1,500 are other doctors training in psychiatry. The aims of the binational college—involving Australia and New Zealand—are to improve the mental health of both communities, and in particular for those who have mental illness. The college also runs a training or education program for registrars.

Of course, we are interested in the standards and advancement of the profession and the quality of the care delivered. It must be said that the college does not control the way that people practice; that is controlled by government regulations and so on. An example of what we do is improving the quality of care for people in the community. There has been a recent advocacy campaign about physical illness and mental health. I am sure the Committee has been given evidence about the shocking fact that people with serious mental illness might die up to 20 years earlier than other members of our community. We all need to do something about that.

In terms of the way we work, having heard Professor Day's evidence and following on from that, it is important to note there are a number of standards in Australia. There is the National Standards for Mental Health Services, which have been around for about 15 years and have had some recent revisions. There will be another revision. It dictates for everyone the way that we would expect that to happen. That has had a lot of consumer and carer input; a lot of families and people with lived experience and people suffering from mental illness have had an input. Basically, that is the gold standard for what they should have.

The Australian Commission on Safety and Quality in Health Care also has a set of safety standards. I am sure members have heard about that. That has quite an effect for us because one of those standards is around patient experience and involvement of people. Psychiatrists see that patient experience as key to our practice. For example, it has recently published a medication safety and mental health guideline. The college also publishes a set of guidelines or position statements. We have one about the treatment for major mental illnesses and, of course, it contains pharmacological and other guidance.

However, we would see treatment of mental illness as not just medication; of course, it also has a psychosocial and sometimes even a spiritual dimension. We see that as very important as well. We have a series of position statements around that and guidance. There is some particular guidance around prescribing for children, off-label prescribing and so on. We are currently engaged with a number of other colleges—the colleges covering physicians, general practitioners and pathologists—in a pharmacogenetics working group. It is again looking at having a joint position statement around the evidence to support that one way or the other.

Having listened to what Professor Day said, our view would be that we need to examine this, and that there are many things that affect the way medication affects people besides pharmacogenetics. There are issues of gender, other medications people are taking, the situation they are in, their diagnosis, their liver and kidney function, and so on. That should all be part of the considerations et cetera. We look forward to that. I think we would probably say that we take what is clearly the evidence and try to turn it into guidelines.

As you can imagine, in mental health there are always great white hopes about the future, and people want to promote this and that. I do not say that we are cautious, but we take a view that the evidence must be clear. People are always advocating things to us that may turn out—as there is a history in psychiatry—to be dangerous treatments rather than useful treatments. We need to be clear about that. The major issue for us is around that we value the experience of people with mental illness. One of our skills is understanding that. We try to make that a keystone of the treatment. I am happy to take any general questions.

**The CHAIR:** How do you think New South Wales is performing with regard to—

**Associate Professor ALLAN:** I do not work in New South Wales.

**The CHAIR:** I accept that. You can probably be—

Associate Professor ALLAN: But I have worked in New South Wales in the past. I would say that mental health services in New South Wales are very similar to others around the country. It is very important to note that New South Wales has some excellent centres in universities and in some of the research institutes, including at the University of South Wales in Sydney and in Newcastle, at the Brain and Mind Centre, the Black Dog Institute, the Hunter Institute and so on. You have world-leading researchers and clinicians. You have the opportunity to translate evidence-based practice into great practice. Like all services, you have lumps and bumps. You have shortages in country areas, as does every service in Australia. You also have a maldistribution of psychiatrists. You have a lack of access for people who might have a serious mental illness and who live in the country or in the western suburbs, or who have money issues and so on. There are those challenges that face everyone.

**The CHAIR:** There is primary care for someone with mental health issues, and if their issues escalate they end up in acute care. Perhaps that would not have been required had there been greater access to either primary care or some—

Associate Professor ALLAN: Again, every mental health service in Australia faces this. I cannot provide the exact figures for New South Wales, although they are available in the Report on Government Services. There is a need for greater care in the community; not only medical care but also in the social support area. You have some fantastic social support programs in New South Wales, such as the Housing and Accommodation Support Partnership, and Queensland has the Housing and Accommodation Support Initiative. They provide wraparound social supports for people with serious mental illnesses and housing. It is a very good program. But then there is a gap where people do not have those kinds of social programs.

There is a need for quality primary care. There are people who obviously have gaps and do not have general practitioners. There are gaps in psychosocial supports and then there are gaps in community crisis services so that many people end up in crisis in emergency departments. If you get to an emergency department, the chance of being admitted is higher than if you were not in an emergency department. Then there are often issues about discharging people because there is no psychosocial support or the things necessary to get them. Most places would say that 20 per cent or 30 per cent of people in hospital might be there because there is nowhere for them to go because of reasons of homelessness, a lack of agencies and so on. That is certainly a systemic problem.

**The CHAIR:** In your opinion, who provides the best practices?

Associate Professor ALLAN: New Zealand has some aspects of best practice. Their spend in percentage terms is about 30 per cent on the non-government sector rather than here, where it is about 5 per cent or 10 per cent. That is the average spend in Australia. That is more diversion from admission and more psychosocial support. Over time under successive governments there has been an erosion of that system. People point to the New Zealand system of 10 years ago and say that that was ideal. They suffer the same kind of funding cuts that we do. That is the system.

There are very good mental health services in Scandinavian countries that have a very high spend on mental health. They do things such as provide everybody who has a serious mental illness with their own psychosocial support or their own psychotherapist for two years to help them to get back on track. There are interventions like that that you could make that are not necessarily there. The problem for health systems in Australia is that because of the increasing demand and because of the spend, there is a lot happening in that acute sector. The further social support alternatives to housing and admission are often not there.

**The CHAIR:** If we take the New Zealand example of 10 years ago, were there measurable positive clinical outcomes commensurate with the extra money?

Associate Professor ALLAN: Yes, I would say that there were. There were certainly in the satisfaction that people felt about their care, about the quality of being treated in the community, about destignatisation, particularly from the Maori population around an acceptance of the family way of doing things, the "whānau way" rather than just having to be stuck into a system. I think there were very clear measurable outcomes for that.

**The CHAIR:** Outside of larger investments, are there hindrances in the culture and the silos of the various parts of the health system that inhibit us?

Associate Professor ALLAN: Sure. Health systems are hard to move; I am sure you have experienced that. To pick up a health system and move it to another place is often quite difficult because they are very busy and very dedicated people. Everybody that I know who works in the health system—and I know many people—are all working very hard at doing what they are doing and they are all making an important contribution in that space to what they are doing. Some of the issues are that that might not the best spend for the dollars but to

disentangle that from people who are very dedicated and where there are some results that are quite clear and measurable is quite difficult to do. I know people say that doctors do not want to change or they are stuck in their ways. I do not think that is actually true. I think doctors, nurses and other people all remain very dedicated to their patients; it is just that that big picture, turning that ocean liner around—it is not just a little boat, it is a big ship—is really quite hard. That is the issue. It is a systemic challenge for legislators and administrators obviously.

**Mr MARK TAYLOR:** You spoke in your opening statement about the training and educational role for registrars at the college.

Associate Professor ALLAN: Yes.

**Mr MARK TAYLOR:** Could you expand on that? What is the gap?

Associate Professor ALLAN: Many of the specialties in Australia are reaching saturation point where the workforce is saying we have got enough of them. That is not to say that there is not a maldistribution of those. If you were to go and find a cardiac surgeon in western New South Wales that might be difficult. For us, there is still a gap in the number of psychiatrists throughout the country and, as I say, that is particularly related to country areas and lower socio-economic areas. For us, the gap is to continue to train registrars at an increase of about 1 per cent or 2 per cent a year over the rate that we are currently training. There was a time when it was difficult to fill training places. It is not difficult to fill training places now so we anticipate that we can do that. I think the issue for us is really that even when we train people there are not always that many incentives for people to be in the less serviced areas.

**Mr MARK TAYLOR:** And you do not have any ideas on those incentives?

Associate Professor ALLAN: I have many ideas on that.

The CHAIR: Let us hear them.

Associate Professor ALLAN: One of the things you have in New South Wales is compulsory psychiatry training in country areas. That is not a College of Psychiatrists policy; it has not been but that is something you have that I think has been very useful. I think you need to think about the incentives you want for people to work in those areas. I am here today in Sydney. It is a very attractive place but everybody wants to come here; they do not want to be out in the country. So the living conditions, the work practices that you have, a mixture of public-private, the support that you might give to set up a private practice, different ways you can do that using practice nurses—rather than having everybody in public, having a mixture of public-private and using some of the Commonwealth schemes to get better services. All those are available for you to do. I think also providing those psychosocial supports for patients so that doctors and nurses in those country areas do not feel that they are the only person 24 hours a day on call; that there is some method of having that wraparound and comprehensive service. Some places do that quite well. Others do not have that opportunity.

**Mr STEPHEN BROMHEAD:** You mentioned as an attraction to get psychiatrists into regional New South Wales having a mixture of public-private and help in setting up a private practice. Have you found there has been a real objection to that from public health practitioners in the public health system in having that public-private relationship in country centres?

Associate Professor ALLAN: Not necessarily. I think it is more about what that local area thinks they need to have. Often there have been people who have been in public and they have gone to private and do bits of both. I have a number of friends and colleagues who work in New South Wales in that sort of system and they are very happy with that and they feel encouraged by the health service to do that. I think there has been an issue in New South Wales around the fly-in fly-out service. It is quite an expensive service to fly someone somewhere for a day and fly them back. There were a number of chief executives who objected to that kind of cost when they could have had people living onsite.

That has certainly happened in western New South Wales. I think technology to support that is really advanced. For example, I am aware that in rural New South Wales a patient might present to a country hospital. They might be seen by the psychiatric nurse on duty and the consultation with the psychiatrist might be via videoconference in Sydney. I do not see too much wrong with that, provided at each end the right sort of care is delivered to them. Those are the kinds of things that can be wrapped around. That is innovation adaption, wanting to do the best for your service really.

**Mr LEE EVANS:** As to the uptake of student doctors interested in psychiatry, have you got enough psychiatrists?

Associate Professor ALLAN: We have started a thing called the PIF, which is the Psychiatry Interest Forum, which is open to all doctors in training and junior residents—people who are in year one, year two or whatever, before they enter psychiatry. That has about 1,100 members throughout Australia. We give a whole range of things such as special education weekends and scholarships to conferences. We sponsor an essay competition with a prize and lots of things, and then we offer them particular mentoring and opportunity to spend time with people to find out what the profession is like. All the students that I have spoken to in that really enjoy it. There has been quite a conversion rate from that.

We try to give people an experience that keeps their interest in psychiatry once they form that rather than—and I am sure you have already heard about this—being put off by the sometimes difficult things about acute services, overwork or overload that can happen to junior doctors, but to try to look at what the profession holds for them in their development and their care of patients. That has been a very successful thing for us. That has been aided with money that we have had from the Federal Government around that. In New South Wales there has been a New South Wales rural psychiatry training program. You have had a grant that has sponsored education for registrars and other students in the country. That has been very successful and everybody would like to emulate that in their jurisdictions, so that early attraction, early intervention, to get people onside is really important.

**Mr LEE EVANS:** Is there a magic number for psychiatry in each State?

**Associate Professor ALLAN:** The magic number that people work on is one to 8,000 people. New South Wales is over that but the maldistribution means that you still have got a lot of trouble in other places. It might be that not all those people are working to capacity, et cetera, so there is some difficulty in calculating that figure.

**The CHAIR:** On the issue of pharmacogenetics—and you touched on it in your opening statement—what is the college's current position? Is it promoting this sort of testing?

Associate Professor ALLAN: As I said, we are exploring the evidence. You need to be very clear about what is actually available and what actually happens. The nature of the testing is that it is not covered by Medicare, it only covers a limited number of the enzymes—that is not particularly available—and, from my understanding, the information that comes back is not always very specific. What Professor Day was saying was quite correct—when there is a reason that one should do this, one should do it, but there is not really enough evidence to say that routine testing of pharmacogenetics alone is going to solve the answer to those questions about which drug, how to do it and how to use it. It was a good observation.

Our position is that we value that work, we are looking at that evidence, we are trying to present a position paper that is sensible around that, and that is what we are working with those other colleges to do. Because all of the medical colleges have done that. It is interesting that, for example, the Australian Commission on Safety and Quality in Health Care in its use of medications in mental health did not mention the pharmacogenetics aspect, and that was, to me, a very strong, evidence-based examination of the field. I understand that things change and things move. That might have been written two years ago and published last year and so on. I think our position is that we look at what is strong about evidence and we look to see that. We do not think there is enough evidence to say that everybody should be genetically tested at this stage, but I am sure we are moving towards the position where we need to know those things.

Things about medication interactions and genetic variation have been known for some time, but the evidence of what that actually means is somewhat lacking—the double blind trials about that. People can have genetic variation and differences in their plasma levels of antipsychotics and antidepressants and look exactly the same clinically. There can be a tenfold difference in the blood plasma level but their clinical picture can look the same. Understanding what all that means is part of the picture.

**The CHAIR:** To put it crudely, I take it the jury is still out for the college on this one. The Committee is curious to know whether this testing is being promoted as a useful tool—just one of a suite of useful tools.

Associate Professor ALLAN: It would be one thing that people might consider in that range of doing it. It has not passed every hoop. It is not Medicare funded. That is on the basis of the evidence, and they would obviously have to make submissions around that. Sometimes people look for hope in certain things. I have no issue with looking at that. As an aside, one of the great things that has happened in New South Wales that I have not mentioned is that most services now work with clinical pharmacologists on medicine reconciliation, looking for drug interactions and looking at better use of medicines. In my time in clinical practice, that has been one of the great advances—to actually do that work properly with pharmacists. As Professor Day said, not everybody has access to clinical pharmacologists all the time. I have used some in some guidances I have written and other

things, so I understand their value. I think it is one of the factors people need to consider. That is where the current state of evidence is—that it is not for everybody but for some.

**The CHAIR:** As there are no further questions, would you like to sum up? Is there anything further you would like to say?

Associate Professor ALLAN: No. I thank the Committee very much for taking an interest in mental health—that is really important. From the college's point of view, we recognise that there are many things in the system that could be improved. We see our role as being part of that improvement—to work with government, to work with communities and to work with consumers and carers about that improvement. We are very open to evidence but, like all medical organisations, we look at the quality of evidence and want to promote the best quality and safest practice for our patients.

**The CHAIR:** That is excellent. Thank you for appearing here today. We may have some further questions, the answers to which will form part of your evidence. Would you be happy to reply to those within five days?

Associate Professor ALLAN: I am happy to do so.

**The CHAIR:** Thank you for appearing today.

(The witness withdrew)
(Short adjournment)

**DAVID HEFFERNAN**, NSW Branch President, The Pharmacy Guild of Australia, NSW Branch, sworn and examined

**The CHAIR:** I welcome David Heffernan from the Pharmacy Guild of Australia. Do you have any questions about the procedural information sent to you?

Mr HEFFERNAN: No.

The CHAIR: Would you like to make an opening statement?

**Mr HEFFERNAN:** Yes. I am here representing community pharmacy in New South Wales. Ultimately, community pharmacy is the community triage. We are the most accessible health professional—no waiting time, walk in off the street and ask for the pharmacist. We feel that we are the most under-utilised health professionals in Australia. Experts on drugs but also experts on health, we understand the whole spectrum of many health conditions whether mental health, which is topical today, but any other physical health problems—cardiovascular, neurological pain, acute pain, sports pain. Ultimately, we are the triage where you go first if you have a minor ailment or for investigation to see if it is something more serious.

The world of mental health is an evolving space and it has been for some time. It is an exciting space for the opportunities that we can deliver in community pharmacy. It has been 25 years or so since Prozac first came out. It was a big, new wonder drug—a beneficial drug—but it came with its own problems. There is now a whole spectrum of different drugs. Drugs are not the answer. What is causing it? What can we do to prevent it? Ultimately, you do not want to take drugs, you do not have to take drugs, but life circumstances such as grief, trauma, or a clinical condition can dictate whether you require the drugs or not. It is a very interesting space, mental health. It is relatively new in the way we treat it. In the last few decades it has changed dramatically.

We do find in public policy that we grapple with solutions and the best way to deal with it. Sometimes we feel there is a lack of interconnective flow between different health professional groups, whether it is from the hospital discharge to a nursing home to the GP surgery to the mental health clinic, the drug and alcohol and so on. That can be a problem but as we are getting to a digital age, which accelerates faster than anything, the opportunities are there and they are very exciting. We have capacity to deal with a lot of these things. We have programs. There is a Federal one called a MedsCheck. You come in and ask for a MedsCheck. We do not have it in a category of mental health, it is a Federal initiative. We would like it in mental health.

As a clinical intervention, at the end of the day, if you are suffering some sort of mental health condition you can come in and we have a look at the medication and see if there is anything in your medication that is an issue and look at your other health problems. It is an evolving space there too. A majority of pharmacies have, and we are seeking swiftly to get all pharmacies to have consultation rooms, a private area where you can sit and chat. It is as simple as asking, "Are you okay?" It has happened to me and it happens to a lot of people, people break down in front of you. There is stuff going on in their lives. It is somewhere to go quietly. "Do you want a drink of water? Let's have a chat." We can look up their history, make phone calls to the general practitioner and start an intervention there and see if we can help the person. Pharmacists—I will go back to my first comment—are under-utilised in that area. I see community pharmacy as an opportunity in the mental health space.

**The CHAIR:** How would you describe the interactions of the community pharmacy, the communication and coordination between community pharmacists, GPs, hospitals and other healthcare providers?

**Mr HEFFERNAN:** We are a phone call away. The phone and fax are the most important tools we have at the moment. The internet is slow to catch on. We are in the process of looking at the My Health Record coming out federally but that comes with data storage and breaching and security and privacy problems. That will come with challenges. The phone and fax is it. GPs and pharmacists have a good relationship in the community. It is a symbiotic relationship. We are on the phone to each other. We are each other's safety net: "Did you mean to write this for four times a day? He really should only be having one". They say, "Gee, sorry." We have that good relationship.

Also, the discharge is getting better and better from the hospitals. However, these are areas we would like to streamline and use technology so we can have a resource to look at to see a history, to see if someone has forgotten something. At the moment you go to a doctor and it is communication. You speak, they listen, and it depends on the information. So many times people come back and say, "I forgot to tell the doctor. Will it matter?" They come to the pharmacy because they cannot get another appointment for another couple of weeks. Those communications are there, but they could be better.

**The CHAIR:** What is your experience with management after discharge of a mental health patient?

**Mr HEFFERNAN:** It is getting a lot better. In the last 10 years people would come out and they would have this mixed up set of paperwork, where they have been to a specialist and their GP has got this and the drugs are interacting and mismatching. Now there are protocols in place on discharge, and help from the hospital pharmacist. They ask, "What is your local pharmacy?" and "Who is your local GP?" and "I will send them all the same information." Then the GP interacts and says, "Listen, this person has this history; we do not necessarily agree with your discharge drug regimen." It is getting better but there is opportunity for a more technologically advanced system.

**The CHAIR:** I suppose one of the challenges of the system here is that you can shop around the GPs and get different scripts and go to different pharmacies.

Mr HEFFERNAN: We had a recent fight trying to debate the upscaling of codeine to schedule 4 [S4]. You can develop a mental health condition from pain. Chronic, debilitating pain that stops you working and stops you being socially active can lead to mental ill health down the track. With respect to that doctor-shopping scenario, we had a system in the Pharmacy Guild of Australia called MedsASSIST, which was real-time monitoring. All it asked for was a government identifier like a licence. The pharmacist put in a number and the system would say what they are purchasing, whether they have purchased this in Sydney or down in Melbourne the day before, or if they have been buying one every day for the last two months. So we could identify that problem.

As I said previously, when you visit a health professional most often they cannot take a blood sample and say, "You've got a mental disease." It goes on communication. This is a specific area. You are looking at drug addiction, perhaps. This was the case with codeine, because codeine—an opioid—is addictive. Sometime when people are in the grip of an addiction, they will get around the truth in order to feed that addiction. The MedsASSIST helps stop that. It helps us identify people with a problem. I think Greg Hunt might be asking the States to assist in getting a national real-time scheme going.

**The CHAIR:** Does the scheme that you have been speaking about only exist within the Guild?

**Mr HEFFERNAN:** That is a scheme that we developed ourselves. We saw the problem and we thought that we had to fix it. But it has ceased to exist now, since the codeine—

**The CHAIR:** I just want—

**Mr HEFFERNAN:** If we had real-time monitoring of, say, drugs of addiction and some psychotic drugs—benzodiazepines, for example, which get abused, as well as codeine, or it could be any drug that could be subject to abuse which could develop into a problem—a doctor would know and could say, "Hang on, you've been to my golf buddy down the road and purchased some other drug that is like this."

**Mr STEPHEN BROMHEAD:** Do doctors have that real-time monitoring?

Mr HEFFERNAN: No.

Mr STEPHEN BROMHEAD: Do you understand why they do not have it?

**Mr HEFFERNAN:** There has always been the issue of privacy, and a concern about that. It is the only way to get around that problem.

**The CHAIR:** What is the concern with regard to privacy?

**Mr HEFFERNAN:** Just say you went to the dentist and the dental nurse found out that you were on Viagra. You may go to the doctor in a small country town, where everyone knows each other, and they know you have genital herpes or something. Sorry to frame it around the genital area.

The CHAIR: That is all right.

Mr HEFFERNAN: It is very personal.

The CHAIR: Couldn't that information be restricted to S4 and above?

**Mr HEFFERNAN:** Yes. If it is restricted to medication only, yes. You can draw a long bow but there could be other implications—for example, if knowledge about medication for a person with a mental condition got out to their employer or insurance company or things like that. Privacy has to be tight.

**The CHAIR:** I absolutely agree. I remember the sensitivities around the Australia card, going back 35 years or so.

Mr STEPHEN BROMHEAD: But the pharmacies have real-time information on medication.

**Mr HEFFERNAN:** We do, at the moment, for pseudoephedrine. Pseudoephedrine was used to make illicit drugs. This scheme is called Project STOP. It had the ability for police to look into it as well, and identify people who had been going from Grafton down to Melbourne and going to every pharmacy in between and picking up a box of pseudoephedrine. We were able to stop that. Since that has happened the amount of rejections has disappeared, and you just get these spikes in winter when the cold and flu season is on, because that is what pseudoephedrine is good for—as a decongestant.

**Mr STEPHEN BROMHEAD:** If doctors had a real-time scheme for medication only they would see not only the abuse of painkillers and other things, but they would also be able to see what other medication some other doctor had prescribed, which may be contraindicated for what they are about to prescribe, and be able to see the implications of two medications working with each other. Some patients do not tell the doctor all the medications that they are on.

**Mr HEFFERNAN:** Yes. They forget or there may be another reason. Sometimes the patients are ignorant of what is going on. They have four medications and they come in saying, "I have no idea what this is for." They have had a five-minute consultation or they have been in the hospital and have been in a state of overwhelming anxiety and did not listen to a thing the doctor said. It might have been written down in medical jargon that they do not understand. Those are some of the reasons that a patient may not divulge some of the medications. It might not be intentional. I guess it is a no-brainer; it is a safety issue. It helps identify people. In the area of mental health medication misuse can be high.

**The CHAIR:** Has it been your experience that dosing up on various medications has actually led to the mental health issue rather than treating a specific—

Mr HEFFERNAN: Any drug will have side effects. I will give you an example of an illicit drug—ice. That will cause mental ill health. Anecdotally—I have only seen this through my experience with police—there seems to be a black market in the types of drugs for schizophrenia. People withdraw from these amphetamine medications and they need something to stop the complete horror and anxiety that they are going through. That is a new area that is coming out. Ice is a drug which can cause these mental health issues, but so can benzodiazepines.

**The CHAIR:** I was getting at the issue of the misuse of prescription medication, and the overprescribing of it, and the blind prescribing of it by one GP as well as the next, when it is being dispensed without any central database.

**Mr HEFFERNAN:** Yes. Pharmacies are not interconnected either, so we do not know if you have had it yesterday from this pharmacy. We do not know if they are selling it out at the nursing home. There is no clarity there, so real-time monitoring is—

**The CHAIR:** I was just interested in how many people might end up in the mental health system as a consequence of abuse of medications or prescription drugs.

Mr HEFFERNAN: They are ending up with the coroners. The Australian Institute of Health and Welfare report last year displayed that death from prescription drugs has outpaced that of illicit drugs in Australia. So it is an issue. Primarily, the drugs that are the cause of this are the opiates—Oxycontin®, Endone® and codeine—and also the benzodiazepines. Tie that in with alcohol. If you are in a state you could be affected by alcohol and taking these drugs. Sometimes it is accidental; other times it is not.

Mr MARK TAYLOR: Do you have any statistical data on the relationship between local pharmacists and patients? Are people linked in with their pharmacists on a regular basis? I am trying to get at the current trend towards certain medical practitioners. There has been a bit of a downturn in relationships between people and their primary healthcare professionals. I am wondering whether they are linked to their pharmacy more strongly than they were with their medical practitioner. Have you done any studies or do you have any statistics on that?

**Mr HEFFERNAN:** I would have to check. That is pretty broad, but we do have different statistics and such which I could properly offer to you that show, I suppose, more specific relationships, such as how many times a person visits a pharmacy each year and how many people there are in the population. We also have some of that MedsASSIST data, which showed us the drop in number of sales of codeine once we implemented it. It actually helps people to realise that they might be taking a bit too much.

**Mr MARK TAYLOR:** Do you not have something that shows, for example, that 80 per cent of people always go to their one pharmacist, or anything like that?

**Mr HEFFERNAN:** Yes, we have some figures on that—community pharmacy. Yes, we do.

**Mr MARK TAYLOR:** Right. What type of services were you considering expanding into when you suggested that there is a lot more that you could offer?

**Mr HEFFERNAN:** Let us stick to the topic of mental health. We are looking at a spectrum. We could have someone who is probably a bit anxious because they have not had enough sleep or they have been watching a Netflix series for longer than they thought. They need sleep and they have yelled at someone who has said, "Go and see your doctor. You seem to be a bit stressed." The other end of the spectrum is that you are admitted to a mental health unit because you are out of control.

Down at the lower end is where the pharmacy space is—anything from offering advice on sleep hygiene, such as, "'Don't have four cups of coffee before you go to bed. Maybe that's why you not getting any sleep and you're probably a bit anxious", up to saying, "I think you need to see a doctor. There could be a clinical problem here." It could be a bipolar type of thing or there is a repeated action. It all comes from communication. This is the part where we can take the load off, say, filled-up doctors' books and GP waiting times. We take the load off that when doctors' books are filled up with appointments for minor ailments.

It is the more serious ailments that get shunted out to the hospital system. There are papers on that and there is also the phenomenon of cream skimming. Ultimately, some businesses might set up business models whereby they churn. They say, "We won't do your glucose today. Come back tomorrow and we'll do it." That sets up a turnstile operation. It is more economically attractive to treat healthier patients and say, "G'day. How's the kids? It's nice to see you. Come back next week to make sure that that ingrown hair hasn't come back."

It is a little bit cynical, but it is out there and it is a problem. That is where the obese, multi-comorbidity person, who probably needs a lot of care, gets shunted out because they take a lot longer and are not as attractive financially. I know there are processes in place to try to mitigate the fee-for-service model, like healthcare homes which are more of a three-tier structure for a person who may need more help than others and they have a different paying structure for it.

**Mr MARK TAYLOR:** Besides mental health, what other areas do you see in which pharmacists have the ability to provide a service and take the weight off the overall health delivery service?

Mr HEFFERNAN: All minor elements, for starters.

**Mr MARK TAYLOR:** What are the barriers to providing those types of services?

Mr HEFFERNAN: Sometimes it is medication scheduling, such as the codeine up-scheduling. That was one where there was a problem. We thought we had a solution with real-time monitoring. Looking at programs, mental health is a big one but there are programs like chronic pain management—looking at ways to stop it—and having an interrelationship between allied health and experts in medicine. Physiotherapists are experts in joints and muscles and they are much more skilled at some of the issues around joints and muscles than a GP and they can deliver results a lot better. Other things are acupuncturists and osteopaths as well as nurses.

There are also vaccinations—we definitely want to broaden the scope to travel vaccines and flu vaccines. We are currently providing a service for flu vaccines, which is getting bigger and bigger. We have shown with flu vaccines that that has increased vaccination rates in workforce age groups—your productive ages of 18 to 45—and that is a healthy age group that does not generally go to the doctor. They are probably working and they would come in after work and go to the pharmacy to get a jab rather than waiting for a doctor's appointment and taking a day off work. Yes, there are many areas.

**The CHAIR:** The Committee has heard evidence that refers to the lack of adequate research in Australia regarding better targeted psychotherapeutic drug interventions that are based on individual patient characteristics. I think you heard some of the evidence earlier this morning. Are you aware of any research that has been done into adverse reactions for those types of drugs? We were looking at pharmacogenomics and its acceptance within the medical fraternity, particularly with regard to mental health patients. Does your Guild have a view on pharmacogenomics?

**Mr HEFFERNAN:** Yes. Ultimately we look at pharmacology and drug use. It is right to say that more research needs to be done in that space. It is another exciting area. We have mental health, which is an evolving area. Ideally, you want to be off drugs. We do not necessarily have a position on pharmacogenomics because it is in its infancy. But as far as pharmacology goes, we are definitely on.

**The CHAIR:** I sense that there is some resistance to the introduction of pharmacogenomics into the mainstream. They are saying that it is a fairly new field, but it has been around for 30 years or so and I am sure millions of dollars have been ploughed into it. Do you sense that there is some sort of resistance, or is it simply that there is just not enough research?

**Mr HEFFERNAN:** Let me put it this way: A lot of the drugs we see today, at least in pharmacology, are not that much different to stuff that was maybe discovered 25 years ago. The real big discoveries in drugs and such now are the big cancer therapy types of things. With other normal things for blood pressure and other things, the newer drugs are just tweaked new versions of the older ones. Some may say that is maybe due to not enough research and development going into these drugs and because big pharmacies do not see a cost benefit of putting all this R and D into try to find a new wonder drug. That does seem to be going down whereas cancer therapy drugs are the big ones that are coming out.

It may be that there is a lack of research funding. It is hard to get funding for research. Clinical trials now are harder to do for drug companies because there are a lot of rules around putting human beings up as guinea pigs to test out a drug. It may be the case in this field where there may not be enough research. Research costs money. That is the issue.

**The CHAIR:** Thanks for your evidence today. Is there anything you would like to say in summing up?

**Mr HEFFERNAN:** It is just that mental health is the big space that people are stuck in at the moment. They have got to go somewhere and we need to address it. I thank you for your time.

**The CHAIR:** The Committee might have a few other questions to send you, the replies to which will form part of your evidence. Would you be happy to provide written responses within five days?

**Mr HEFFERNAN:** No problem.

(The witness withdrew)

CHRISTINE DENNIS, Chief Executive Officer, Australian Council on Healthcare Standards, sworn and examined

**The CHAIR:** Thanks for appearing to provide evidence today. People from the council appeared at an earlier hearing when you were unavailable. The Committee is pleased that we now have the opportunity to explore some questions in depth with you. Would you like to make an opening statement before the commencement of questions?

**Dr DENNIS:** I believe that we have provided two submissions so far to the Committee and those submissions have been based on the Australian Council on Healthcare Standards [ACHS] perspectives on performance not just within NSW Health but, because we accredit health services at a national and international level, they have also been based on the experience that we have had in that space.

**The CHAIR:** How effective do you believe the current NSW Health performance frameworks are in driving performance improvements within the sector?

**Dr DENNIS:** Based on the accreditation surveys the ACHS undertakes across NSW Health, my opinion is that they are very effective. The health services within New South Wales, like the health services across the country, are required to comply with the national standards that have been developed and mandated by the Australian Commission on Safety and Quality in Health Care. I think that Australia as a health system at a national level should be very proud of its performance around those national standards. There is always opportunity for improvement, but at a general level the health services in Australia perform well. With regard to the performance framework, an area that we are particularly interested in is public reporting of performance data. I think there is a lot more work to do to ensure that public reporting achieves the objectives that it sets out to.

**The CHAIR:** What suggestions could you make regarding the balance between fiscal responsibility in the healthcare system and healthcare outcomes themselves?

**Dr DENNIS:** That was a particular question that we answered in our second submission as well. In our second submission we discussed the fact that we believed fiscal responsibility and clinical outcomes are integrated, that any clinical decision that is made has a financial impact as well, and that information around financial performance, particularly for clinicians, needs to be available as clinical outcome data. Decisions about clinical care are not always undertaken in the context of what that might mean from a financial perspective.

I can provide a story from a past role that I had in a health service in another jurisdiction where some medical staff undertook some research looking at the use of anaesthetic agents within their particular hospital. They were comparing the time that it took for a patient to wake up post-anaesthetic between two different drugs that were promoted by various drug companies that visited the hospital. In the research that they did—which I thought was absolutely fantastic but I do not think it went anywhere—they compared these two drugs. One drug allowed the patient to wake up about 10 seconds earlier than the other drug. The difference in cost was enormous. But all of that information was not available within the MIMS guide, which is the guide that clinicians use to make decisions about drugs.

What the medical staff that undertook this research suggested was information about drug cost should be incorporated into the MIMS as well so that clinicians are making decisions not just in terms of their clinical outcome, which might be 10 seconds earlier, but also the fact that a particular drug might cost three times as much money. That cost effectiveness of drug choice was not something that they were being exposed to in terms of their decision-making. I thought that was a really good example of clinical decision-making that is done in the absence of understanding what the cost impact is.

**The CHAIR:** We still do not have that?

**Dr DENNIS:** I do not believe that costs are incorporated in the MIMS, but I have to say that I have not checked the MIMS recently.

**Mr MARK TAYLOR:** We have been focusing on the sharing of information between practitioners and specialists, et cetera. In your opening statement you talked about capturing information from consumers about patient side effects. Can you explain what you meant by that?

**Dr DENNIS:** There are a couple of things there. First of all, as to capturing information from consumers, lots of studies have been undertaken over the past decades looking at how do you actually understand patients' perspectives on their health care. For many years, particularly early on in the standards space—because our company has been working in standards for 40 years—the approaches to consumer

perspectives about their health care was very simplistic and it asked very basic questions about how quickly was your nurse call bell answered, what was the quality of food, what was the cleanliness of the bathroom facilities, et cetera? Health services for the most part collected that information on an annual basis for decades. It really did not change anything; it was part of a required audit process to try to demonstrate that you were seeking consumer feedback about the care that they were provided.

The work that is being done internationally now is much more focused on patient stories, so absolutely sitting and listening to the stories from consumers about their health care. It is not just about the hotel services that exist within a hospital but their overall care and particularly their care post-discharge from an acute hospital and whether or not they felt that the episode of care resulted in a better quality of life for them. From our perspective, the stories that we are very interested in are where things go wrong as well, because those stories are very powerful in providing us information about how we can improve and prevent things from going wrong for other patients and consumers.

I also touched on the public reporting. As I said, that is an area of particular interest for ACHS but also from my own background outside of ACHS because I think there needs to be a lot more work done in terms of the type of data and information that is available that is intended to help consumers choose where they might seek their clinical care. I will give you a couple of examples. Approximately eight years ago, I was working in a jurisdiction—not New South Wales—that decided that it was going to provide a dashboard that consumers could look at to make decisions about what emergency department to visit based on the length of the wait time.

New South Wales does provide a dashboard—most jurisdictions have those dashboards now. But, as I said, my story is from approximately eight years ago. The dashboard was set up and people could visit it and see that a particular hospital had a wait time of four hours or eight hours and had 10 ambulances—dare I say it—on the ramp waiting to get in as well. That was intended to influence people when they thought, "Will I go to that emergency department or another one that might be 10 kilometres away?"

I happened to be working in a health department when that dashboard was launched, and, for the most part, the people who looked at the dashboard were the media and Opposition members. People did not tend to look at a dashboard before they made a decision to go to an emergency department. As an employee of a department of health, I spent many days writing numerous briefings about what was happening in the emergency departments in response to questions from the Opposition and the media about what we were doing. We found that, as much as it was intended to support consumer choice, it was not being used for that purpose. Last year, I attended an International Society for Quality in Healthcare conference in London. I listened to a speaker talk about research they had done into the public's response to high-profile system failures.

The focus of the research was not whether the emergency department was full; it was on how the public reacted to insistences of high-profile system failures in their local hospitals, such as the Mid Staffs scandal in the United Kingdom. The research looked at three high-profile system failures in the United Kingdom and whether the elective activity occurring at the three hospitals decreased after the front-page stories, which, of course, went on for weeks. The scandals were of the size that if someone missed it in the paper one day, they did not miss it. The research identified that of the three big health services that had experienced high-profile system failures, two of them has seen a downturn in planned elective activity—which includes elective surgery, outpatient appointments and so on—for approximately three months. There was a slight decrease in elective activity, but by six months the level was back up to normal.

The other health service saw no change in its elective activity at all. The research concluded that people did not base their choices about health services on what they read in the paper, mortality data or high-profile system failures, but on things such as the location of the health service in relation to where they lived, the accessibility of that health service through bus or—in the United Kingdom—trains routes, recommendations from family and friends who had used the health service, and referrals by their doctor to a consultant operating at that health service. People were not making decisions based on the data that was published. In fact, what was happening was that the data that was published—and we have seen this in Australia too—was being used to drive internal improvements within the health services. The people who work inside the health services know that that data is out there and they look at it. It is more of an internal driver of improvement than an impact on where the public chooses to have their care.

**Mr MARK TAYLOR:** In the aftermath of the catastrophic events that were published, did the data show that consumers decided against the elected treatment or that practitioners also decreased the amount of elective activity?

**Dr DENNIS:** The research was done in the United Kingdom. The published research showed that there was a decrease in elective activity. The researchers' explanation for that was as much as the electivity activity decreased, it went back up. That indicated that people were making decisions to cancel elective

surgeries in the immediate aftermath, but eventually their decisions turned around and they ended up going back to their health service.

**The CHAIR:** Much like an airline that loses a plane?

**Dr DENNIS:** Exactly. A plane crash is a little more catastrophic. Often high-profile system failures in health do not necessarily involve the whole hospital and instead there might be a run of deaths or high-profile adverse events that impacted the news. If we look back at the Bacchus Marsh and Melton Regional Hospital incident, I think seven baby deaths occurred. When a plane crashes, of course, it is the whole plane and the people who are stepping onto a plane the next day can decide not to get on the plane. But, eventually, the activity starts to go up and people move on. The analogy about plane crashes has certainly been something that has been used in health care because, where we look at it from an improvement science perspective, adverse events that occur in health might not be a plane crash, but at a global level on an annual basis there is a higher number of people injured by our healthcare systems than in events such as plane crashes, which would be front-page news.

**The CHAIR:** Public reports can be completely misleading if read without an educated analysis of what they contain.

**Dr DENNIS:** Absolutely.

**The CHAIR:** An example of how the data could be misinterpreted is that in the hierarchy of hospitals the mortality rate is going to be higher in the larger hospitals because they take on the most difficult cases, in comparison to base hospitals, for instance, which do not deal with the most complex cases.

**Dr DENNIS:** The risk adjustment is based on population demographics and clinical risk factors. Chair, you are quite right. There was a scenario given about a young and healthy 19-year-old. Clearly, tertiary and quaternary hospitals are dealing with clinical-risk patient profiles that are significantly more challenging than smaller health services that only deal with elective patients for a certain diagnostic group. The smaller hospitals are not dealing with the complex, quaternary patients that you have described. Comparing unadjusted mortality data between those two health services is going to send the wrong message that the mortality data of a smaller hospital looks pretty good compared to another hospital. That is why the risk adjustment is important—because it does take into those population demographics and clinical risk factors into consideration.

As the Chair said, the question is where the data impacts the decision-making of a person in the general public. We tend to look at the National Health Service [NHS] quite frequently, not because it does everything wonderfully well—it is just where we tend to have a look. The NHS used to publish league tables of their health services that included information such as mortality data. They were the big league tables that took centre page in the print media and listed all the hospitals. The NHS stopped publishing that data because people were not using the league tables to make decisions about where they went for their care. The league tables now tend to use terms such as "fair", "good" and those sorts of things, rather than the detail about the data.

**The CHAIR:** So you would be confident that the data collection across the broad range of agencies within the health cluster is being analysed and used, which is leading to better outcomes? It is not just being collected for the sake of it and then being stored on a dusty shelf?

**Dr DENNIS:** Am I confident? No. There is evidence—and we talked about this in our first submission—of a lot of reporting but the capacity for analysing the data and using it to improve things is not always evident in all health services. In fact, the example we used in the first submission was in regard to Bacchus Marsh. I am not sure if the Committee is across that particular event, but there were concerns raised in the review that was undertaken by Euan Wallace, Stephen Ducker and Deb Picone, who is the chief executive officer of the commission, that there was a lot of data collection and data reporting into the central authority but that capacity in the central authority to review it, analyse it and see trends was minimal. There was an overreliance not just in that particular case but also in others because everybody thought somebody else was looking at it.

The issue that we have come across quite frequently, not just in Australia but overseas as well, is the technology we now have available in administrative systems is so good at being able to collect voluminous amounts of data, but what has not been evident is the capacity to analyse the data and to do that feedback loop about how do you subsequently improve.

**Mr STEPHEN BROMHEAD:** I do not know whether you will be able to help with this question. The Committee has heard evidence about medication-related admissions to hospitals in Australia. It has been estimated that 6 per cent of those are emergencies, 13 per cent are medical admissions and 40 per cent are geriatric admissions. Those admissions are because of the medications those patients are on. This is about a

doctor prescribing medication and the patient going back a month later because it is not working. The doctor does not say to the patient, "Stop taking that medication. I am going to put you on this medication." The patient then takes both medications. That is a cause of concern with hospital admissions.

The Committee also heard evidence from the Pharmacy Guild of Australia. They have a live real-time computer connection with all pharmacies. They can see, for example, whether someone is buying pseudoephedrine or they are purchasing codeine-based medication and if they got some the day before at another chemist. General practitioners and hospitals do not have that. Pharmacies, general practitioners and hospitals are not linked together so that a doctor, a hospital and a pharmacy cannot see what medications a person is taking—for example, a patient may be prescribed a sedative and then another doctor prescribes a sedative but with a different name so the patient does not realise they are double-dosing. Would you see it as an advantage if there was a real-time connection between doctors, pharmacies and hospitals on medications but not with other things?

**Dr DENNIS:** First of all, the question is outside of my expertise and it is certainly outside the remit of the Australian Council of Healthcare Standards. However, having worked in health in Australia for 40 years, absolutely any information that better informs a clinician's decision about prescription medication is going to improve his or her decision-making about the next steps for that particular patient. Knowing that a patient has been prescribed a particular drug somewhere else two days before is going to improve the clinician's decision-making about what the next course of treatment is. I cannot really comment on the percentages of people who turn up to emergency departments with medication-related issues without having a look at the data. Then it would just be my perspective on it, not really an evidence-based position.

**The CHAIR:** The Committee heard evidence earlier that some people have been taking two doses of the same medication because of the brand names. The example given was Setrona and Setra 50. The patient did not realise that they were one and the same. Does the council have a view on how the names of these drugs should be presented on the packaging information provided?

**Dr DENNIS:** To be clear, the role of the Australian Council of Healthcare Standards [ACHS]—there is often some confusion between the Australian Council of Healthcare Standards and the Australian Commission on Safety and Quality in Health Care—is an accreditation agency. It will, under contract, go into a health service and assess the performance of that health service against a set of standards. The standards are created by the commission. They are the standards with which independent assessors will enter a health service and look at their performance. The standards do not drill down to that level of detail in terms of what systems might be in place to address like medications or generic names, et cetera. It is not within their scope. I did hear the previous speaker talk about these sorts of problems and how they impact on clinical outcomes.

I think one of the issues I have been aware of in past roles is that it is not just a combination of taking two medications that are the same but have a different name, but also prescriptions that are provided to patients that are never actually filled or only a half dosage of a prescription is taken—for example, an antibiotic that was meant to be taken for 10 days is only taken for five days. There are a lot of other issues associated with medications. There are a number of them that collectively all need to be addressed at some stage, but I think you would probably have other people more expert in that to be able to answer.

**The CHAIR:** Earlier on when we were talking about the data being used you said there were voluminous quantities but that it is not getting analysed. What sort of expertise is needed? And where is that expertise needed to analyse the data, then to implement it and then have the implementation monitored?

**Dr DENNIS:** It is probably needed in a number of places. First of all, from an accountability perspective the health service that is providing the care and collecting the data needs to have the capacity within the health service to know that they are collecting it and analysing it. For the most part I think the health services, including health services in New South Wales, do put considerable effort into understanding the data they are collecting but I think there is always opportunity for improvement. But the health service is not just in New South Wales; other jurisdictions also provide data to their central Health departments, the Independent Hospital Pricing Authority and the Australian Institute for Health and Welfare, and they used to provide data to the National Health Performance Authority.

There is a lot of data going to a lot of different bodies that also have expertise around analysing data and for the most part those pillars like the Independent Hospital Pricing Authority and the Australian Institute for Health and Welfare do have good expertise to unpack the data. They provide good reports back to the health services. From a department perspective, I think that when you are asking health services to report to a jurisdictional department of health, there is a level of accountability that sits with the department also receiving the information. So they also have a role and an accountability in being able to analyse that data, interpret and provide feedback.

I think the difficulty has been, and this is not based on the Australian Council of Healthcare Standards perspective but my previous roles, particularly when the National Health Performance Authority were providing feedback about comparative length of stay by way of example for particular diagnosis-related groups [DRG], the information was good because the information came in a good format for managers, for CEOs to be able to read and interpret, and it provided you with an understanding of where you sat compared to your peers in terms of length of stay, for example. An example would be a fractured neck of femur, and for the jurisdiction that I was working in, with the hospital that I had, which was the tertiary hospital, it had lengths of stays that far exceeded the peer hospitals. So it provided us with an opportunity to ask the questions why, because the length of stay, outside of impacting on clinical outcomes for a patient, was also impacting on cost. So clearly, as a CEO of that particular health service, I was interested in why we are sitting so outside of our peer group length of stay for that particular procedure.

In order to have a look at that, I sent the information to the director of surgery and the response came back pretty quickly that we were different. Clearly, that was not the response I was looking for, but it alerted me to the fact that just sending it and saying "Please explain" was not going to drill down into what was going on. So even at a hospital level, that understanding of data, particularly where it is collected for divisions or for particular DRGs, that expertise needs to be supporting the clinicians in terms of the work that they are doing. We eventually unpacked that it was one particular clinician who had a habit of keeping people in for a longer period of time without any clinical reason. But it was the immediate response that alerted me to the fact that there needed to be more support in terms of understanding the data, not just in a unit that analysed data but at the bedside.

**The CHAIR:** Could you explain how you actually dealt with that clinician?

Mr STEPHEN BROMHEAD: Which one? The one who gave the response or—

**The CHAIR:** No, the one that was leaving them and taking up a bed.

**Dr DENNIS:** We sat down with the clinician and we went through the data in more detail. Historically, when you present data and you start talking about cost, that is not always the thing that grabs people's attention, because cost, as we started saying at the outset, is not something that has necessarily been at the coalface of patient care. We sat down with the clinician, we looked at the data, we looked at his length of stays compared to his peers, because it was the aggregate that was pushing us up in terms of their overall performance. So we had to unpack it. There was no point just sending them that raw data and saying, "Please explain why we are sitting outside of our peer average for that particular DRG and around length of stay?" Of course, the response was going to be very light coming back. So we also learnt a lesson that we had to sit with them and unpack and try to understand what was driving it, not just from a unit perspective but based on individual clinician performance.

There is another jurisdiction that I am aware of that does do that for their clinicians as part of their performance review. So it will, when it sits with clinicians on an individual basis, provide information about their top 10 DRGs that that clinician is actually discharging and look at things such as length compared to the average—all of those sorts of things—as part of their performance review; not to do it in a way that is critical, but to do it in a way that is about let us have a look at why you have got longer lengths of stays, because that, from a cost perspective, is a big driver where you can have a patient that comes in for a fractured neck of femur and has a five-day length of stay and another clinician will have them in for 10 days. Not only is it a cost burden for the hospital if there is no clinical reason, but there is a lot of evidence that shows that that is putting the patient at risk of further complications.

**The CHAIR:** Am I right to say that a clinician is, in many ways, a free agent in some respects because the decisions that they make on the clinical care of the patient, apart from protocols and all of that, is their decision?

**Dr DENNIS:** Predominantly, yes. As you said, there are protocols that provide clinicians with guidelines about clinical care for particular patient populations.

The CHAIR: But if that clinician that we were speaking of decided—

Dr DENNIS: "I don't want to discharge you"—

The CHAIR: "I don't want to discharge you" and is just going to leave them there—

**Dr DENNIS:** Historically, that is the clinician's decision, in conjunction with the patient, of course. But, historically, that has been the clinician's decision about whether or not they believe that the patient is ready for discharge, and, of course, they are accountable for the care of that patient. Where you have, like this particular clinician, somebody that has significant longer lengths of stays, when I met with that clinician we met

with the head of unit as well. So there are clinical leads now that probably did not exist in the same space 10, 20 years ago that are directors of surgical divisions that are much more aware of clinical outcomes and the costs of providing care within the particular directorates.

That is more evident, I believe, than certainly 10, 20 years ago, and those heads of those particular divisions, or the directors, do take up much more responsibility for not just the clinical care but also the cost of services within their division. But, for the most part, it is not until you start looking at the data that you start unpacking things such as the fact that you have got a clinician that has got a longer length of stay, a higher adverse event rate including infections, those sorts of things, that that is the sort of information that you need to be able to address poor performance.

**Mr MARK TAYLOR:** Outside your organisation's remit again, but based on your experience—you heard the gentleman before from the Pharmacy Guild—is there, from your perspective, any glaring ability for community pharmacies to take more of the burden off the healthcare system?

**Dr DENNIS:** I think so. I think that we have to start thinking about health care at a broader level than just the acute hospital and the GP. There are so many more people that can contribute in the community to improving the health of the population rather than waiting for the person to become so unwell that they need to be admitted to an acute hospital. So I think in the roles of health professionals, health practitioners that sit in the community, there is significantly more opportunity, but I think there has to be some definition about what their remit is, because if they start stepping into a space that they do not have the skill and competency for, that could put that person at risk. So there needs to be a clear understanding of what boundaries sit around whoever is undertaking that particular role.

If I may comment on a point: If people abuse their prescription medication can that lead to mental health? My view, when I was sitting in the gallery, was that if somebody is abusing their prescription medication they have probably got a problem before. It is not the medication on its own, because I do not believe the average person intends to abuse their prescription medication. I think that there is probably something causing that in the first instance; so what is the root cause of them abusing prescription medication rather than the prescription medicine leading to a mental health issue.

**The CHAIR:** It has been very enlightening. Thank you for your evidence. No doubt we will have a few more questions that we will provide in writing. Would you be prepared to answer those within five days of receipt?

Dr DENNIS: Sure, yes.

**The CHAIR:** Thank you very much for appearing today.

(The witness withdrew)

(Luncheon adjournment)

ELIZABETH KOFF, Secretary, NSW Health, sworn and examined

NIGEL LYONS, Deputy Secretary, NSW Health, sworn and examined

SUSAN PEARCE, Deputy Secretary, NSW Health, sworn and examined

**The CHAIR:** I welcome the representatives of NSW Health. The Committee appreciates the return of previous departmental representatives and welcomes the appearance of the secretary of the department, Ms Koff. We also invited Chief Psychiatrist Dr Wright, but he was unable to come. I also welcome Dr Nigel Lyons and Ms Susan Pearce from the Ministry of Health. Before we proceed, do you have any questions concerning the procedural information sent to you in relation to witnesses and the hearing process?

Ms KOFF: No, thank you.

**The CHAIR:** Would you like to make an opening statement?

Ms KOFF: I would like to thank the Committee for extending a further invitation to the Ministry of Health to attend the Public Accounts Committee Inquiry into the Management of Health Care Delivery in New South Wales. I thank the members of the Committee for their time and commitment to the inquiry. Health care delivery is a complex area and we pride ourselves on delivering the best care to the population of New South Wales. As secretary I am delighted to be here and be supported by my two deputy secretaries, Susan Pearce and Nigel Lyons. I have read the transcript and believe Ms Pearce and Dr Lyons capably presented our NSW Health submission to the inquiry.

I will not reiterate details from our submission or the information presented by Ms Pearce and Dr Lyons. I understand the Committee seeks further evidence on transparency, performance reporting and data collection, and issues relating to drug reactions and adverse events are particularly of interest in medical management. We welcome the opportunity to further respond as we firmly believe that the transparency of data and information is critical and integral for us having a high-performing New South Wales health system, which does then result in the best outcomes for the population of New South Wales.

**The CHAIR:** What were the most significant findings that came out of the Chief Psychiatrist's 2017 report for the Department of Health?

**Dr LYONS:** I do not have that report in front of me.

Ms KOFF: Are you talking about the seclusion and restraint one?

**The CHAIR:** That is right.

**Dr LYONS:** There were a series of recommendations in relation to the report—and I want to take the opportunity to again extend our condolences on the tragic events that were the initiation of that report. As you are aware, the Chief Psychiatrist led an independent review panel that conducted extensive consultation right across the New South Wales health system. Over a six-month period there was review of the international literature in relation to this area, as well as extensive consultation with clinicians working in acute psychiatry. There was also the opportunity to speak with people who had been receiving care, their families and the individuals themselves, to inform the process, which I think was most welcome.

The review indicated that there were a number of areas. To refresh my memory I will bring the review report up, because I have it here with me. There were a series of recommendations around a number of different areas. First, culture and leadership, where there was a recommendation around the need to integrate leadership development for people working in mental health care; a number of recommendations around accountability and governance that were made, particularly around where mental health sat in the governance and management of the local health districts, and particularly the director of mental health's role in relation to the rest of the executive of the local health district.

There were also some recommendations around the relationship between acute mental health and the emergency departments, and the criticality of that relationship in relation to where people first present for their care to be provided. There were also a number of recommendations around the policies that exist being clarified to ensure that in relation to seclusion and restraint it was really clear, from the point of view of the clinicians providing that care, what was to be accepted, and appropriate care, a more simple and clearer guideline about how that care should be provided. There was also—and I think we touched on this the last time we were present here—a need to strengthen up our smoke-free policy, strengthen up our nicotine replacement therapy and access to that therapy in the context of acute mental health care provision.

There was a requirement for us to think about establishing a more comprehensive patient safety program at NSW Health level, and there were also a couple of recommendations about workforce, in particular about a minimum standard of skills required for recruitment of staff into mental health services and performance reviews that would be undertaken. There was also, importantly, a recommendation around peer workforce and the importance of peer workforce. A number of our services have established peer workforces but there was a need to expand that extensively across the system.

There were also some recommendations about consumer involvement, not just in the co-design of facilities and services and how they are provided, but also in providing feedback about the care that is received. Importantly, there were some recommendations about the transparency of data reporting in relation to instances of seclusion restraint, their frequency and where they occurred across the health system. I shall elaborate a little further. On the environment, there were a couple more around the seclusion rooms in emergency departments, having those assessed, and also a recommendation around the therapeutic environment and the need to think about the acute mental health facilities and the environment that is provided for the most therapeutic care.

All of these recommendations have been accepted by the Government and there was—I think at the announcement that they had been received and accepted—a commitment to \$20 million to upgrade the therapeutic environment across our mental health facilities. The Ministry of Health is in the process of finalising a detailed implementation plan, which is due this month to be presented to the Ministers. It will then be the subject of implementation across the system to ensure that the recommendations from the review are appropriately implemented and monitored to ensure that they have been delivered and achieve the outcomes that have been set from the recommendations in the review.

**The CHAIR:** When can the Committee expect it to be fully implemented?

**Dr LYONS:** The implementation plan is under development at the moment. There are a number of recommendations in it that will take some time to implement. We are very conscious of the need to move swiftly and to show the community, our patients and our clinicians, that this review has led to real improvement. We are very committed to making sure that we move quickly, get as many of the recommendations implemented as swiftly as possible and recognise that there will be some that will be short term, there will be others that will be medium term, and then some that will be over the longer term. They have actually been assessed in that way, and the implementation plan that is being finalised at the moment presents them in a way that ensures we can demonstrate real change.

**The CHAIR:** Will that plan be made public, how will it be benchmarked, or how will performance against that plan be assessed?

**Dr LYONS:** It is our intention, subject to the Ministers finalising their review of the plan, to make it public. We will then commit to a regular monitoring process. The governance of the implementation is in the plan. That will primarily be through the existing mechanisms in the ministry. Much of the work needs to be undertaken through clinician management and teams at the local health district level. We will need to provide support, resources, some policy direction and some oversight where that is required. However, much of the change needs to happen where care is provided in the units in the local health district. We will use our existing mechanisms to monitor progress, but we are very keen to ensure that we report progress. We are very happy to do that publicly.

**The CHAIR:** When will this plan be finalised?

**Dr LYONS:** It is imminent. The commitment given when the Ministers received the review was that we would have a detailed implementation plan this month, and it will be delivered this month.

**The CHAIR:** Do you have some idea of when the various recommendations will be implemented? You said that some were short term, some were medium term and some were long term. When will we see some of the boxes being ticked?

**Dr LYONS:** Each of the recommendations has been broken down into a number of component parts in terms of detail around how we will respond. Accountabilities have been assigned and there are time frames for them to be delivered. The vast bulk are within the next 12 months to 18 months. Many of them will see progress within the next three to four months.

**The CHAIR:** Do you have the \$20 million in the bank?

**Dr LYONS:** The \$20 million is certainly committed and will be available in the 2018-19 budget.

**The CHAIR:** I know budget funds are committed, but it can be notoriously hard for departments to get their hands on them. We will see it as a line item?

**Dr LYONS:** It is certainly committed and will be able to flow to start the changes with the districts from July 2018; it should be in the 2018-19 budget. To clarify what we are doing to prepare for that, a process is under way at the moment to start assessments in the local health districts to look at what changes they recommend should be made in each of their facilities. We will allocate the \$20 million based on that assessment.

**The CHAIR:** Is it enough?

**Dr LYONS:** It will make a very big difference in terms of the therapeutic environment. We are not talking about major capital; there will not be a lot of building work. It will be about the aesthetics of those environments and how we make them much more therapeutic in terms of them being less sterile. It will be about furnishings; it will be about the physical environment involving painting and those sorts of changes that can be made. Therefore, \$20 million will go a long way to addressing a lot of those sorts of things.

**Mr MARK TAYLOR:** During the inquiry there were comments about delays or the time it took to fill nursing roles. I am talking about the recruitment process. Is there any update, particularly in relation to recruitment and an increase in the number of mental health nurses?

**Dr LYONS:** I do not have an update on the progress with regard to changes in recruitment. However, I can reiterate that where clinical positions become vacant it is a local health district priority to fill them. Recruitment and retention, particularly in rural and regional areas, is difficult sometimes in terms of having people with the appropriate skills able to be appointed to those roles in a time frame that allows there to be a seamless transition from when someone leaves until someone new goes into the role.

The districts are very conscious of the need to ensure there is limited impact on clinical service delivery as a result of changes in personnel. Where there is a requirement to fill clinical positions in the short term, they will do so to ensure that continuity of care can be provided while the recruitment is ongoing. That will sometimes require people working part time doing more hours or clinicians on agency lists being recruited into those positions on a short-term basis to ensure the services can be maintained.

**Mr MARK TAYLOR:** Is there any recruitment strategy for mental health nurses in particular, or is it part of the recommendations and implementation work?

**Dr LYONS:** The review made some clear recommendations about workforce requirements for mental health facilities. They will be subject to the implementation plan as I outlined.

Ms KOFF: Having read the submissions from other organisations, I know that mental health nursing has been raised. The Mental Health Commissioner, Dr Tim Smyth, mentioned the notion of mental health being quarantined and seceding a little from the rest of the health system, and he said that it has been a double-edged sword. I believe that in some ways it has been detrimental. I echo Dr Smyth's opinion that they have become somewhat isolated from the broader health system as a whole. That then manifests itself in issues that played out in the recommendations in the report about the culture and connectedness of mental health services with the rest of the health system in which they participate. That is where we get the disconnect between emergency departments and mental health services.

One of the recommendations in the report is that the nurse unit manager on duty or the duty nurse for the night should call in on the mental health wards to check that everything is okay. For some reason a decision was made in the mists of time that the night duty supervisor did not need to include the mental health wards in their rounds. That reaffirms the concerns we have that there is a disconnect. I believe that that plays out in mental health being an unattractive nursing opportunity or option when they are isolated from the rest of the health system. Those cultural issues are something we definitely need to focus on to make it more attractive.

**Mr LEE EVANS:** In the course of the inquiry, and specifically in evidence given today, various issues regarding the use and appropriateness of psychotherapeutic drug treatment in institutional settings have been raised. This includes issues regarding misdiagnosis and adverse drug reactions that have resulted in ongoing negative health outcomes. How does NSW Health monitor the use of psychotherapeutic drug treatments?

**Dr LYONS:** In relation to medication management generally, we have a sophisticated process to ensure that any instances where medications have been missed or have caused adverse consequences are recorded. I think we mentioned when we were here previously that we have a detailed incident management system. If there is an incident that has caused an adverse reaction in a patient, it is reported and classified in terms severity and impact on the patient. There are four categories. Category 1 is the most serious and category 4 is an incident that has not had a significant impact on patient care. The vast majority of medication incidents in our system are in categories 3 and 4. They are one of the most frequent incidents, but they are usually less severe than some other events that could occur that have been reported.

In relation to medication and people in our mental health facilities, we are very conscious that many interactions with medications and adverse events are reported frequently by people who are receiving care. One of the requirements of care and assessment of people when they present to our facilities is to have a look at the medications that people are on and to check with the patient as to whether or not they are taking them and whether or not they having any side effects that need to be managed more effectively. The other issue is that clinicians will look at whether or not any of the medications may have interactions. Sometimes medications can potentiate side-effects because they have a cumulative effect, so they check for those as well and will moderate the medications based on their assessment.

There is also a process called medication reconciliation, which is actually an assessment where, because people receive care in a number of different settings, medications can be changed by different clinicians who are providing their treatment, whether that is a general practitioner or a specialist in private care. Somebody in an emergency department who attends may not be able to recall accurately all of the medications they are on and there may have been changes made. It is a process that goes on, not just at the initial assessment but through the course of the admission. It is very important then that information is also conveyed at the time of separation of our facilities back into the community about what medications have been changed or added as a result of the care that is provided. It is a challenging area and it is difficult to keep track of, particularly as people move through different components of the system and changes can be made.

**Mr LEE EVANS:** The other issue that probably affects people in a mental unit is the use of illicit drugs along with prescribed drugs. On that level of category 1 to 4, and mainly categories 3 and 4, where does it tick over into violence? Is it category 1, or is it category 2½ or 3?

**Dr LYONS:** If there was violent behaviour that causes some safety issues for staff, that is classified differently. It would not be classified as a medication incident; it would more likely be classified as a behavioural incident. If there is an issue of that causes any concern in relation to the safety of the staff, it would be categorised that way and its severity assessment would immediately jump up. Where there is any concern about safety to patients themselves, to other patients in the area, to staff or visitors, that would be an incident that would be classified—

Mr LEE EVANS: On a different scale?

Dr LYONS: Yes.

Mr STEPHEN BROMHEAD: You spoke about psychiatric nursing. We had evidence this morning about the difficulty in obtaining psychiatrists and specialists in country and regional New South Wales. Part of the answer to having psychiatrists willing to go into regional areas is for public health to be more amenable to public-private; to be able to get the psychiatrists, set them up in a private practice as well as in the public system. My area, which includes Taree, has a mental health unit but we have great difficulty in obtaining a psychiatrist. At best we might get a fly-in fly-out. There are numerous complaints about after-hours service, a lack of service on weekends or a lack of service when no-one is there at all. Is public health doing anything to try to fill those gaps?

**Dr LYONS:** This is a really challenging area. There is not just an issue around the overall shortage of psychiatrists; there is also an issue around the proportion that are working in the public sector versus the private sector and then even within the public sector there is an issue around the distribution of those specialist psychiatrists between metropolitan, regional and rural settings. As a system, we are very conscious of the fact that there are challenges in recruiting and retaining specialists into some parts of our system. We have been doing a number of things to look at that over the short, medium and longer term.

The arrangement about having the opportunity to work across the public and private sector is certainly acknowledged as an important one. We are not prescriptive about saying that, if somebody is recruited in, they do not have the ability to work in the private sector as well. Many of our services will create that opportunity to have a proportion of their clinical time spent working in the public side but also having the potential to have a private practice as a part of their arrangement in the town or the city that they are working in. There has also been a very strong focus on how we provide professional support for clinicians because clinicians who might go and work in a town where there is only one or two of those types of clinicians require ongoing professional support and collegiality, so creating networks is a really important component.

Many of our districts have very strong networks of services. In fact, some of them actually go across local health district boundaries. A very important component is: How do we provide appropriate professional, collegial support to visiting clinicians who might have subspecialty expertise to actually provide support to the resident specialist? Those arrangements are in place. We are increasingly looking at how we can provide technology support—for example, in relation to mental health care, the use of telehealth is a really important

way that a specialist clinician who might be providing general care to the whole community can get backup and expert advice from their subspecialist colleagues in a metropolitan setting about what other things they might do to provide the appropriate care for a patient.

Increasingly what we are looking to do is to create an environment where we can train people—so, doctors and nurses trained in rural and regional environments and being able to work in those environments—to enable them to experience what clinical care and professional life is like in those different towns, cities and country settings and be supported to have that training and then work in those environments for the longer term. We have increased the number of training positions in those rural areas. I think psychiatry training has gone up by around 30 per cent over the last five years. There are now 500 psychiatry trainees working in the New South Wales health system. These are people who are working to gain their speciality qualification.

Many of those are working in regional and rural settings, being supported in their training through a network arrangement, so they rotate around as well and gain the appropriate experience. It is our desire that we train those psychiatrists and then retain them in the public system, and then address some of the issues that I outlined around the distribution of those specialists across the State as well through some of the arrangements that I talked about by supporting them professionally into the future. It is a very complex issue. We are tackling it on a number of different fronts and we will continue to work until we can get the appropriate specialists in the places where they are required to provide the appropriate care for the community.

**The CHAIR:** What happens in other countries? There are other places like Canada and parts of the United States which have very remote areas and large regional areas: How do they attract and keep not only specialists but also nurses?

**Dr LYONS:** This is not just an international problem; it is a national problem. We see the same issues across Australia as well as internationally. Nobody has a silver bullet solution to this. Most jurisdictions and most countries are looking at their particular context and trying to ascertain a way to ensure that they can have the workforce they require into the future. Health Workforce Australia did some analysis of the requirements for the health workforce for our country into the future and the projections are quite amazing in terms of the requirement for additional people to be trained to meet the needs of our community—not just population growth but the incidence of disease into the future. We are going to need to invest significantly more in health professions over the coming years.

Most of the countries around the world are finding they have the same challenges that we have—a shortage of appropriate specialist workforce and distribution issues as well. The solutions are being looked at by each of those countries in the context of the way they provide services, recognising that every health system is actually different as well. The context in which you are trying to find the solutions varies depending on the particular circumstances. Many of the things that we are trialling are being trialled by other countries around the world, but the workforce issues are not just State or national; they are international issues.

**The CHAIR:** When we were in Lismore we heard about the length of time it takes to get replacement staff, particularly in the mental health unit, and Mr Bromhead referred to this. Why is it? Is it such a dreadful job or is the pay appalling? We have so many trained, qualified nurses in the community who do not work in the sector anymore for one reason or another. I know there have been attempts with grants to re-skill them to get them back. What is going on there? Why does it takes so long to get these vacancies filled?

**Dr LYONS:** Mental health, like many of the areas in health care, is an area where people choose to go and specialise in that particular area. If we talked to our managers in the rural parts of the State, that is not an uncommon issue for many specialty areas—that they have difficulty attracting people with those specialist skills. It is a factor that in health there is now a requirement to train people with a high degree of expertise and skill to be able to effectively deliver care and those people are not always resident in all parts of the State. It is a factor that we have more difficulty in the more rural parts of our State and it is an increasing problem because of the factor of the size of the population and the people who are resident there having those skills and being available, or else having to relocate.

Ms KOFF: But rest assured you hit the nub of part of the problem: It is a challenging area. It is a challenging area for staff to work in. I admire them and they have the utmost courage sometimes because it is difficult work in mental health units. In some cases, too, it is quite frankly a lifestyle choice. Because we are dealing with a workforce with a changing age demographic—the generational changes—people do not seem to want to put up with what they put up with in the older days, such as shift work. It is the reality of what we are dealing with. Some people do not like shift work, and part of the reality of working sometimes in rural and remote areas is that you are on call regularly.

Psychiatrists in private practice do have a better deal in the scheme of things because a lot of them put a phone message on their answering machine to say, "If you have problems after hours, please attend the local emergency department," whereas in mental health units the psychiatrists are on call and need to be ever present. However, that being said, it is not beyond our capacity to create different sorts of solutions to enable us to have the workforce that is absolutely critically necessary to deliver the services. Let me reassure you it is definitely not a financial factor that is delaying. I know in previous years it was always said there was a delay in recruitment because were trying to save money. With the way we fund district health services now according to activity-based funding, the budget is there, the staffing is there, the resources are there. It is just the logistics of the process that may be taking longer than desirable.

**The CHAIR:** Is the bar set too high in that requirement to be a qualified psychiatric nurse? If there are not enough people out there to fill these positions, is it not better to have somebody that has at least some experience in the area and exposure to that area but who is not completely qualified?

Ms PEARCE: I do not think it is a matter of the bar being set too high. People who are suffering from mental illness are the same as other people in the health system who have illness and they do need expert care. But I do not think that we have sought to set the bar too high and therefore are excluding people. In fact, we welcome beginning practitioners. One of the initiatives we have undertaken, for example, for beginning registered nurses when they commence employment is a rotation program between a hospital environment and a mental health unit to give them a bit of experience in both. Sometimes there is reticence for beginning registered nurses to go straight into mental health because they worry that if they do not like it they might struggle to get back into a surgical ward or another part of the hospital arrangements. We have sought to overcome that so they can experience what it is like to work in mental health.

From a training perspective, one of the other things we should also acknowledge is that it can be quite a daunting environment. One of the other initiatives we undertook was to invest in sending some undergraduate students to a recovery camp so they could see people who have mental health issues in a more positive environment rather than when they are very acutely unwell in a mental health unit—to try to even out that experience a little. The other thing I will say, finally, is that we have invested—and there were government commitments with regard to this—for clinical nurse educators specifically for mental health over the last couple of years. We are looking to see if we can do more, the idea being that in order to get more people into practice in mental health units across New South Wales we recognise that sometimes they might need a little extra support as they are getting used to that environment. Those positions have been rolled out and have been across NSW Health facilities as well.

**Mr STEPHEN BROMHEAD:** I have two questions. My first question is about the training of psychiatric nurses. Have you considered the idea of getting people to look at whether they want to branch into psychiatric nursing 12 months or two years into their university nursing course, so you are getting them earlier? Part of their university course is going into the hospital and getting some practical experience, so they could be getting some practical experience in the mental health area.

Ms PEARCE: There are options during the undergraduate preparation for trainee registered nurses to go into mental health environments and to do that as part of their practical experience. They are required, however, during their three-year program to meet the requirements that are set by the Australian Nursing & Midwifery Accreditation Council, so they have to meet certain requirements in order to be registered at the completion of their three-year program. That is why we have been keen to try to get to them at the start when they are graduating, noting that if they are interested they will already have had an opportunity to experience the mental health environment during their preparation and to give them that opportunity to get into mental health nursing quite early on.

In the sands of time, in the past nurses could be registered purely as a mental health nurse without any qualification in a more general nursing sense. However, it is fair to say that restricting practice in that way is not necessarily the best idea. Whilst we want people to be able to specialise, particularly in rural and remote areas they need to have some versatility to be able to work across different settings when the occasion arises. So it does get quite difficult, but there is certainly an endeavour to encourage more people into mental health nursing, because it is clearly a part of our system where our most vulnerable patients at time require expert care and we are keen to see that improve.

**Mr STEPHEN BROMHEAD:** I go back to the issue of medication and the fact that a significant number of people are admitted into public hospitals because of medication issues. We received evidence this morning that it is 6 per cent into emergency, for the whole of geriatrics it is 40 per cent, and for medical admissions it is 13 per cent. We also received evidence from the Pharmacy Guild with their real-time connection between chemists for pseudoephedrine and codeine.

**Mr STEPHEN BROMHEAD:** Do you think it would help if we had the same real-time connection for all GPs? There is evidence of people getting medication from one GP then going to another GP for other medication—the second GP does not know what the first one has done, and it creates a cumulative effect of medications, contraindications and other things. Do you think we should look at all GP services in New South Wales having live-time on medication—not the other privacy-related things; just medication—with the pharmacies and hospitals so we all know what everybody is on?

**Dr LYONS:** This is a really important area—certainly the issue around what medications people are on. As I outlined, it could be changed by different practitioners in different settings. It is a challenge. While I do not want to duck the issue, the issue of general practitioners is an issue for the Commonwealth Government, because primary care and what happens in the general practice space is a Commonwealth issue, not directly a State responsibility. But I will say we are very conscious of the need to provide better connection of existing information systems that clinicians are using in whatever setting. In fact, just this morning we were talking with the primary health networks in New South Wales about the criticality of systems that are in general practice and the systems that we use in the State health system ultimately being connected and sharing information. There are a range of privacy issues and technical issues that need to be overcome to enable that to happen ultimately, but that is certainly where we want to head in the longer term.

In relation to monitoring and prescribing, there is an initiative in which New South Wales is joining with other States and the Commonwealth on the prescribing of schedule 8 drugs, which are limited in terms of their use but have the potential to cause great harm. The narcotics are in that category. There is a desire to introduce a national system that enables real-time monitoring of prescribing for those types of drugs. We are in the process of assessing and New South Wales is committed to working with the other States, Territories and the Commonwealth Government to establish a national real-time monitoring system for schedule 8 drugs. That is under assessment at the moment as a first step to where we ultimately need to go.

**The CHAIR:** I find it bizarre that schedule 8 drugs are not monitored.

**Dr LYONS:** It is a fact.

Mr STEPHEN BROMHEAD: We are talking about bringing it down to every medication.

**Dr LYONS:** That's right. **The CHAIR:** To schedule 4.

**Dr LYONS:** Any drugs that can be prescribed.

**The CHAIR:** On the matter of technology, how would you characterise the current quality and functionality of the incident information management system?

**Ms KOFF:** I think it has served its purpose. New South Wales was one of the leaders in incident reporting and one of the hallmarks of a high performance health system is incident reporting and transparency around it. Originally it was following the Garling special commission of inquiry that we embarked on a journey for a statewide incident reporting system. It has, over time, become not as sophisticated as we would like in a health system. Hence, we are undertaking a review for replacement or updating of the incident reporting system. From my perspective as secretary and health system manager, the important thing for us to understand in assessing the quality of the health system are the incident reports we receive. That, in itself, gives us a retrospective view of what has happened and what has gone wrong.

The ministry diligently assesses those in conjunction with the Clinical Excellence Commission. We understand the incidents that we are having, the severity assessment code 1s, SAC 2s, 3s and 4s. The most important thing that we are looking at that the reporting system needs is information on patient complaints. Because complaints give you the other dimension of assessing what the safety and quality is in the delivery of your health system. The third aspect that we are keen to get an understanding of is the culture of the organisation around safety and quality. Most of the international evidence indicates that you can get a very good predictor of the safety and quality of the health service that is delivering the service on the basis of triangulation of the complaints, the incidents and the clinical culture within the organisation. We are keen to move to a system where we can have a more predictive understanding of safety and quality rather than always looking retrospectively at adverse events.

**The CHAIR:** Still on the Incident Information Management System [IIMS] software.

**Ms KOFF:** We are full of acronyms in Health, always.

**The CHAIR:** Did you collect feedback from the staff who use the software?

Ms KOFF: That was part of the issue why we need to revise and update. There is concern expressed that they enter the incident and they do not receive feedback on progression of the incidents. The new products have those feedback loops to make it explicit what actions have been taken. It is our responsibility, when adverse events have been documented and occur, that we make the changes necessary to avoid their reoccurrence.

**The CHAIR:** There is a project to replace it. Where are you at?

**Ms KOFF:** It is in conjunction with the clinical excellence commission and eHealth that is progressing the project.

**Ms PEARCE:** The matter is still being worked through with the vendor. The latest information I have is that the vendor, the company, was purchased by another company which has added another layer of complexity to the negotiations. It is a work in progress at the present time.

**The CHAIR:** Is it the change in ownership of the company that is the reason for the delay?

**Ms PEARCE:** Some of the other issues in terms of the functionality still needs to be worked through. It is a relatively small vendor who commenced the work and there are issues in terms of the user testing that came through. Consequently there was a requirement to go back and look at the issues and in the meantime there has been a further development. The intent is to replace the existing system and that will happen, it is just a matter of time.

The CHAIR: So IIMS is still running?

Ms KOFF: Yes.

**The CHAIR:** All incidents are being reported?

Ms PEARCE: Yes. In addition to the processes that the secretary outlined, every single day of the week we review the most serious incidents with the Clinical Excellence Commission. We ensure that the correct notifications have been made. We ensure the patient and staff have been adequately cared for and we also make sure that we close the loop in regard to the particular agency or facility that is involved. The secretary has already touched on our work to better predict and to that end we are recruiting currently to a patient safety position within the ministry that will be fairly and squarely positioned to pull together that work along with a number of others. I think we respond quite well when serious incidents have occurred. Noting no serious incident should occur, but we have a low rate of serious incidents.

We had 34 events for 2015-16 out of around two million overnight stays in the health system. What we would like to do for the lower level incidents is become more predictive of where they are likely to occur and take action before serious events occur, as opposed to taking action once they have occurred.

**The CHAIR:** This replacement system, is it used elsewhere?

**Ms KOFF:** I would have to take that on notice as to what other States use it. My recollection is that Victoria has a similar system. We will find that out for you, Mr Chair. The main principle of incident reporting is a fundamental requirement around safety and quality—to assess it. To paint the picture of safety and quality you need more than just the incidents. It is important we address incidents, but ensuring safety and quality across the whole system is far more important. We have had the incident reporting for a while. The question we start asking ourselves is: How do we start shifting to a more responsive health service system that has safety and quality fairly and squarely in the forefront of its mind?

In terms of the governance structure we have in NSW Health, under the Health Services Act the boards are responsible for the corporate and clinical governance of the local health district. Part of what we are moving to in the health system is quite explicitly stating to the boards that part of your obligation and responsibility is to oversight the safety and quality of the services that are delivered within your district.

**The CHAIR:** In one way they are hamstrung because they get imposed upon them a software system.

**Ms KOFF:** One part of it then, if I may progress, in some issues—this is a conversation we have had in that we have a highly devolved health system, as you would appreciate. With 130,000 employees and two million separations, it is big and it is complex. There are some things that we have that are mandatory—that are non-negotiable—and that every health facility and every employee needs to abide by. We cannot have do-it-yourself systems and things developing that are not going to be able to give us a good understanding that our system is consistently performing and providing the information that is necessary.

So in terms of setting some standards for IT solutions, such as the incident reporting system—and also the criteria around incident reporting in the health services—they are specifically specified for what constitutes SAC 1. We must put those issues in as non-negotiable, immovable aspects. Where the discretion occurs on some things, however, at the district level, is in how they want to manage the quality and safety within their local organisations, how they want to receive reports, and how they want to receive the information that is necessary. We set some very high-level indicators through the service agreement but there is a far greater wealth of information that is available at the local district level, and they need to address the areas where they see there are potential deficiencies in the safety and quality of health care.

This year, for the first time, we have asked each district to do a quality account for us at the ministry, to be more specific in what issues each district wishes to address with respect to safety and quality within their health system. If you would like to know more about the quality accounts, Ms Pearce's portfolio has been looking after that. That represents a significant change in the way we have managed safety and quality historically within the health system in New South Wales.

**The CHAIR:** How confident are you that the people in eHealth—after taking over the running of the Incident Management System [IIMS] from the Clinical Excellence Commission—are actually out on the ground, getting first-hand accounts of what is required?

Ms PEARCE: We are confident in eHealth. There are expert people there who are used to dealing with contractual matters, with multiple vendors around various electronic systems. What has improved over time, with respect to the products we have in NSW Health, is that there has been a far greater level of input from people on the ground in regard to the useability, which was one of the reasons that the upgraded of IIMS was required to be re-looked at. The feedback from people on the ground indicated that there were some issues that needed to be improved in the new system.

There is no point us rolling out electronic systems that our staff find unacceptable, unusable or counterintuitive to what they are trying to do. Their input is absolutely crucial to that process, so I have every confidence that once we work our way through the contractual matters with the vendor we will be back out to start talking to them about the useability of the system. But there should be no suggestion that currently incidents are not being reported, because they are, through the existing system.

**The CHAIR:** The concern that has been raised with me is that IIMS is not perfect—

Ms PEARCE: We agree.

**The CHAIR:** —and that at the moment, those who are running it are so remote from the coalface that its replacement is destined not to be any better.

**Ms PEARCE:** I can perhaps understand some frustration amongst staff who are waiting for the new product. It is a complex issue, but, as I said, eHealth is well used to consulting with and establishing contact with people on the ground. They do not simply sit in a remote office and determine an electronic system for clinical staff to use without consultation with them. Over the years, I think it is fair to say, clinical have felt frustrated by some of the products that have emerged, but I believe that in more recent times—Dr Lyons may have further comments—the processes around the rollout of those various tools has improved.

A lot of work goes into ensuring that staff on the ground are well aware of them, because patient safety, frankly, relies on that. There is no way we could roll out large-scale electronic systems across a system of this size without proper input from clinical staff, managerial staff and other staff within the health system, because that would not make any sense whatsoever.

**Dr LYONS:** I have been directly involved in the implementation of one of the clinical IT systems in the recent past. While eHealth was responsible for that system, it was driven by clinicians. There was extensive involvement of clinicians right across the State to advise what product should be purchased. Then they were extensively involved in ensuring that it was going to meet their needs, and that it was configured to ensure that it provided appropriate support for them to provide the care that they were wishing to provide in a safe way.

That is the process that is undertaken with any of our systems as they are implemented. There is extensive consultation with the users to ensure that the users' input into how the system is configured, and then how it is implemented in our services, is what drives it. Sometimes that is a complex process because one of the things that is of benefit in New South Wales is that we do have consistency about many of the IT systems.

There will be some who will argue that there is a downside to that, because it creates complexity in terms of the implementation—because it is such a large and complex system—but we are one of the few States in the country that is well placed for the implementation of My Health Record, for example. My Health Record is the Commonwealth's initiative to have a patient-controlled record that goes across all health care—not just

what we provide but what happens in general practice and what happens in pharmacies and other private clinical care environments. Other States are not well progressed for the implementation of that because they do not have consistent IT systems. So when they try to join My Health Record up with the systems they have to join it up with 150 different systems.

Because we have some consistency in New South Wales, because of the approach we take, we are able to share information effectively. When our clinicians move around between hospitals and health services many of the systems are similar—and there is a lot of rotation of clinical staff in our health system—so that they do not need to learn a new system every time they move. So there are significant benefits through the approach we take. However, it does mean that when we implement a system it is challenging and complex to get the approvals from the clinicians, carry out the consultation that is required to make sure they accept it and have input, and will be able to use the system when it is implemented. Those things are challenging but it is of benefit in the long term. There is no doubt that it is of benefit.

**The CHAIR:** Is eHealth itself the subject of key performance indicators and other performance measures?

**Ms KOFF:** Yes, certainly. The governance of eHealth—the chief executive, Dr Zoran Bolevich, who is obviously a clinician—reports to me, as the secretary, and we have an eHealth council. The eHealth council oversights the delivery of all the IT infrastructure across the State, and has representatives from the districts, clinical representation and other committee members to ensure that it delivers against its time frames. There is a significant Government investment in eHealth, for which we are keen to demonstrate value for money, and deliver the key projects on time.

**The CHAIR:** How often are reports produced on the key performance indicators [KPIs]?

**Ms KOFF:** At every meeting there is a program update on the key criteria and KPIs across eHealth on the delivery schedules and approvals processes. Some of the projects are so large that they actually go through gateways and require the involvement of the Department of Finance, Services and Innovation and some of those gateways. We track those at every meeting.

**The CHAIR:** When the Committee was in Lismore, one matter raised was the amount of time that nurses spend on paperwork and preparing as well as dispensing medications. It sounded like there was very little innovation regarding that. Could you give me some idea of what is happening? We are talking about virtually one whole employee if you add up all the hours being taken away.

Ms KOFF: I will hand over to Dr Lyons, but one of the issues we are grappling with in the health system is digital reform, which is the biggest thing in the health system to reform it and change it. It is not without challenges because it requires an extraordinary investment by government, and the Government has been very good in investing in eHealth. It requires an enormous amount of organisational and cultural change in the way we do things. That is what we are grappling with. Understandably, in some pockets there is resistance because, "We like the way we have been doing things", but if we are to become a high-performing system, we need to be technologically advanced. The values that will be delivered are analogous to when you look at how you do your banking now and how we run healthcare things—how you can get your app and get information and digital health records.

Health has been very slow to respond compared to other industries but the main thing for us—and this is not so for so many other industries—is the life and death aspects of the health care we deliver, which is why we must be very diligent and prudent in how we implement some of these things. In the electronic record we are rolling out—and there are certain component parts; the one Dr Lyons was previously mentioning was the intensive care component—electronic medications is another module that we have been rolling out. It is in a couple of districts already.

**Dr LYONS:** Innovation that will occur is when we moved to digital support for medication management. That is underway across the State at the moment. There are a number of our hospitals that already have implemented the electronic medication management system. It will streamline the process and provide benefits in capturing information about what drugs have been prescribed to a patient. It also will give prompts to support the clinicians that will ensure that the medications they are prescribing are not going to interact with other medications. There will be prompts to the staff who are involved in administering those medications to help them to ensure that they give the right medications to the right patient. That will be a significant change. It is being implemented right across our health system at the moment.

In relation to the rural local health districts, I am aware that they are considering their implementation approach at the moment. They are keen to look at a single instance of the electronic medication management system being put across all rural districts.

**The CHAIR:** Is that only in the intensive care units?

**Dr LYONS:** No, that is right across all clinical areas. But the local health districts in rural environments are very keen to implement that as one instance, as I said, which will enable them to gain some benefits in terms of the cost of the system but also because they can standardise the approach to enable a more swift implementation across the hospitals and sites. They are in the process of working through what they need to do to have that implemented. That will certainly be a significant advantage once it is implemented.

**The CHAIR:** You say it already exists in a number of districts?

**Dr LYONS:** In a number of hospitals and local health districts, yes.

**The CHAIR:** Where might the Committee be able to see this?

**Dr LYONS:** You will be able to see it at Concord, at Royal Prince Alfred, in a number of the hospitals in south-east Sydney, and in the Maitland Hospital.

Ms KOFF: The Children's Hospital and Prince of Wales, yes.

**Dr LYONS:** The Children's Hospital, yes. There are a number of hospitals that have the system in place already. But it is being worked through as a staged implementation because there are a lot of process changes required that impact not just on doctors and nurses but on a lot of other staff as well. The process of implementation needs to carefully worked through. It is not as easy as just putting it in and turning a switch on. You have a lot of clinical and process changes required as well to support it.

**Ms PEARCE:** One of the other elements that goes to your question about administrative tasks being undertaken by nursing staff, particularly in the mental health space but also in others, is that we have rolled out over the last couple of years the Productive Ward, which is designed to improve the amount of time that nursing staff, in particular, can spend with patients and reduce the amount of administrative burden upon them. That has been quite extensively rolled out—not everywhere, but it really is about, and I think its catchphrase is "releasing time to care". It is releasing them from such burdens because we do acknowledge that the primary focus should be patient care.

**The CHAIR:** The Committee received evidence regarding local protocol committees that aim to increase the interagency cooperation and coordination specifically for mental health care. Are you able to give us a brief overview of the work of those committees?

**Dr LYONS:** I am aware that they exist. I do not have a lot of detail about how they operate. I know they have been set up to ensure that there is an opportunity for the agencies involved in providing care, particularly police and health, to actually work out how best to support their communities and make sure they are able to respond when incidents occur. I can take on notice a detailed response about how they operate across the State, but I am aware of their existence.

**The CHAIR:** One of the areas we are looking at is the pharmacogenomics. Is there a general resistance to the introduction of pharmacogenomics testing within the health system?

**Dr LYONS:** I am happy to take that question. This is an area which is rapidly advancing. I think it is an area of great excitement and promise for all of us, the area of genomics and genomic testing. We are very keen to embrace the opportunities that these technological advances will actually offer us. However, it is an area which is challenging for us because, while there are advances, the translation of technological research into clinical practice is the area where we need to be thoughtful, careful and considered. The advice I have at the moment is that in relation to this is an area of pharmacogenomics that shows great promise. There are some publications in the literature about its benefit in certain particular circumstances.

It is not yet at the point where we could generally test people and provide advice about what medications they may or may not tolerate well, or which would work better based on their genetic testing. It needs to be introduced carefully and thoughtfully and guided by the research. My understanding at this point in time is that it is not at a point yet where we can move from the research environment to general service delivery. But we will continue to monitor the research as that advances. Where it is appropriate to introduce those changes, we certainly will do so.

We have just set up a genomic steering group at the Ministry to ensure that we have the appropriate advice and input into how we start to ensure that we gain the benefit as research advances—and it is advancing very rapidly—and that use the expertise that we have in the State. We have some of the best experts in the world working in research centres and in our clinical environments here in New South Wales. We need to ensure that we capture those opportunities and realise them in terms of rapid translation into how care is provided so that our patients and community get the benefits from having that expertise locally.

Ms KOFF: This leads the way to one of the big future items in health care. It is either called personalised medicine or precision medicine. On the basis of precision medicine or personalised medicine, according to the sequencing of the genes, the defects can be identified or—it is quite complex—where they understand the manifestation of the disease is occurring, they can tailor the treatment or the therapy according to what the gene sequence is telling them. If I may draw on the experience hopefully that you know of Zero Childhood Cancer, which is at the Children's Hospital at Randwick, in conjunction with the Children's Cancer Institute. For certain tumour types when they know where the sequencing is, they can sequence and then they make the determination of what the most appropriate drug therapy is. The drug therapy becomes tailored specifically to the gene profile that they have sequenced. That then is the personalised approach. The results are looking very, very good.

It would be fair to say that cancer is at the forefront of some of these issues because I think the volume of activity and the sequencing relates itself also with breast cancer, when that one was in the news, and where there is identified understanding of the impact of the genes. It is not as well developed in mental health issues but I am sure there is plenty more research and development to occur.

**Mr STEPHEN BROMHEAD:** I just highlight that to assist with that the New South Wales Parliamentary Lions Club raised \$50,000, which the Minister for Health met with \$50,000, which was then met dollar for dollar by the Garvan Institute.

Ms KOFF: That was excellent, thank you, Mr Bromhead. I must admit one of the most exciting things about this too is the recognition when parts of the health system work collaboratively with each other. The Garvan and Children's Hospital nexus with the Children's Cancer Institute is significant. In the old days everybody used to think they needed to do everything themselves. But now they send the sequencing to the Garvan and it comes back and then they do the personalised approach for the prescribing over there. It is excellent.

**Mr STEPHEN BROMHEAD:** I think, Mr Chair, you went there one day and planted a rose for the Children's Cancer Research Foundation.

**The CHAIR:** I did. Well remembered. Can you give me a run-down of the electronic medical records system used by paramedics?

Ms PEARCE: We might have to take that on notice. The paramedics still use paper records quite extensively in terms of recording information concerning patients who they transport to hospital. There is work underway to better align the two systems. We have a lot of technology around ambulance response and we can tell you at any moment where vehicles are, what hospital they are at, how long they have been there and so on. But what we have got to do—and it is coming—is improve the communication between the ambulance service and the hospital system.

**Mr STEPHEN BROMHEAD:** Is there any electronic connection between the ambulance and the hospital?

**Ms PEARCE:** In what regard?

**Mr STEPHEN BROMHEAD:** A police car has a computer on the dashboard. They can find out about any vehicle, the person in the vehicle, whether there is a danger and all that sort of thing. Does the ambulance electronically communicate with the hospital, saying that they have a patient on board and these are the signs and symptoms?

Ms PEARCE: They do but perhaps not in the way you are describing. They use a computer-aided dispatch system that is quite similar to other emergency services, including police. The hospitals have what we call an ambulance arrivals board, so they can see ambulance arrivals as they are progressing towards their facility. If the patient is acutely unwell or potentially violent there will be a phone call to what they call the "bat phone" for an emergency, so they will alert the emergency department staff to an urgent case that is coming in by road. The emergency department staff have quite a great degree of visibility as to what is coming into them via ambulance—noting, of course, that ambulance arrivals only account for about 25 per cent of presentations to emergency departments each day.

**The CHAIR:** You are not familiar with what devices they are using at the moment?

**Ms PEARCE:** We are familiar. The point is that their electronic medical record does not necessarily marry up with the hospital system medical record. That is a piece of work that needs to be undertaken.

**The CHAIR:** Do the devices that they are currently using receive updates, regular maintenance and replacement?

Ms PEARCE: Are you talking about global positioning systems [GPS] or other systems?

**The CHAIR:** Whatever devices they are using.

**Ms PEARCE:** I would have to take it on notice because some of it is quite granular and specific to ambulance. Certainly the GPS and so on that they utilise to locate people is updated and there is work underway with government more broadly and emergency services with the telco in regard to those types of issues going forward. That is in addition to the work that Health is undertaking to better align the ambulance system with the systems that are used in hospitals.

The CHAIR: I have to declare an interest about something that was brought up by a number of patients and that I have witnessed myself. It is also mentioned in the chief psychiatrist's report. That is the withdrawal of tobacco products from people once they are taken into a mental health institution or indeed any health institution. We received evidence that it is one of the most traumatic things in any episode that a patient can be going through and you are only aggravating them more by depriving them of their access to their cigarettes. Yes, nicotine replacement therapy over a period would be effective, but the situation is simply being aggravated because of the commitment to a smoke-free world. Apart from the problems that present on the health campus with people who are insisting on smoking and the conflict that it causes, in a mental health institution—particularly if they are held against their will—it can escalate their antisocial behaviour significantly.

**Mr LEE EVANS:** Anecdotally, in Lismore mental health patients who feel they need help do not necessarily seek that help because they use tobacco as one of their therapies or their comforts. They do not necessarily book themselves in early, knowing that they are heading towards an episode, because of their reliance on tobacco and their knowledge of exactly what they will be faced with when they check themselves in.

**Dr LYONS:** I think the feedback that the Committee has heard was extensively canvassed as part of the review that I talked about earlier that Dr Wright led into of seclusion and restraint practices and observation practices across the system. I think it was raised extensively during the course of that inquiry. My understanding is that the Committee considered this quite thoroughly and looked at the feedback it received and the evidence in the literature and has come up with a recommendation. The recommendation has reinforced that we should continue with an approach that minimises the use of nicotine in the therapeutic environment by more strictly adhering to our current policy, nicotine replacement therapy.

The experts on the review understood all the issues and were experts in the provision of mental health care. They would have understood all of the concerns people were raising about what it means to have access, and still came up with that recommendation. They believe that we can appropriately manage the care of people and any of the concerns that they have about not having access to cigarettes through an appropriate nicotine replacement regime.

The CHAIR: I thought you would say that.

**Ms KOFF:** It is a really challenging area, and I know when we had some issues of patients absconding it was mental health patients going outside to have a smoke. It is worry that they will take off and not undergo further treatment. That is a real challenge for us. But inherent in the thinking, and what troubles me, is that the physical health of mental health patients is poor and worse than that of the general population. That is a concern for us and is why we, as a health system, need to be vigilant to not only look after their mental health and wellbeing, but to ensure that physical health is managed. The other issue is our responsibility to staff to provide a safe environment to work in. It is a vexed issue. I think there will always be differing opinions on it, but we as a health system need to make a stand on some issues and smoking is one of them—sorry, Chair.

Mr LEE EVANS: Are there any statistics on replacement therapies working in the mental health area?

**Dr LYONS:** I have managed to look at the report I had trouble accessing earlier—I have now fixed the technology. The recommendation and review actually referenced some evidence in the literature. The review team noted contrasting evidence that the introduction of a well-supported smoke-free policy has been followed by a reduction in physical assaults in four English psychiatric hospitals. A 2017 study by Debbie Robson of multiple adult units in the South London and Maudsley NHS Foundation Trust's four hospitals examined the start of a comprehensive smoke-free policy. The study found a 39 per cent reduction in all physical assaults, a 47 per cent reduction in patient-to-staff assaults and a 15 per cent reduction in patient-to-patient assaults through the introduction of a smoke-free policy. There is clearly emerging evidence that if a policy such as this is implemented effectively, it does not contribute to an increase in incidences of aggressive.

**Mr LEE EVANS:** I am interested in the regime of getting patients off the physical cigarettes and putting them onto patches. Do patients stay off nicotine when they get out into the community or is it short term?

**Dr LYONS:** I do not have specific information about mental health patients or people going through a mental health service, but the general view is that any opportunity to intervene and give people the opportunity to have nicotine replacement therapy and to move towards ceasing smoking is a positive thing. Many people continue on after that initial episode. There is significant evidence in the literature that shows that we as clinicians need to take every opportunity. Clinical reinforcement of the importance of that is very powerful.

**The CHAIR:** We will leave on that happy note. I thank you all for appearing before the Committee and giving evidence today. We do have other questions that we did not get to, which we will provide to you in writing. The replies to those questions will form part of your evidence and will be made public. Would you be happy to provide a written response to any further questions within five days of receipt?

Ms KOFF: Yes, certainly.

The CHAIR: Excellent. Once again, I thank you for coming. That concludes the proceedings for today.

(The witnesses withdrew)

The Committee adjourned at 14.56.