Forward Thinking – *What do we know about the safety of hospital care?*

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The quality and safety of hospital care has been in the news in both Victoria and New South Wales in the last twelve months. In this Forward Thinking event Dr Stephen Duckett, Director of the Health Program at Grattan Institute, discussed issues in monitoring and improving the safety of hospital care. What is the role of public reporting? What can and should be measured? What is the role of clinical engagement?

Dr Duckett drew on his role in chairing a recent review of safety and quality of care in Victorian hospitals and was joined by Dr. Robert Herkes, Clinical Director, Australian Commission on Safety and Quality of Healthcare (replacing Professor Debora Picone, Chief Executive Officer of the Australian Commission on Safety and Quality of Healthcare to discuss issues from a national perspective.

Speakers: Stephen Duckett, Health Program Director, Grattan Institute
Dr Robert Herkes, Clinical Director, Australian Commission of Safety & Quality of Healthcare (on behalf of Adjunct Professor Debora Picone AM who was unable to attend)

STEPHEN DUCKETT: Thanks very much everybody. My name is Stephen Duckett, I'm the Director of the Health Program at the Grattan Institute and I'd like to welcome you all here to this *Forward Thinking* event. I'd like to start by acknowledging the traditional owners of the land, the Gadigal people of the Eora nation, and pay my respects to their elders past and present. I'd also remind you that those acknowledgements of country, especially in a health event, are not simply matters of rote but are matters of significance, because Aboriginal people have a life expectancy that's about ten years shorter than non-Aboriginal people. Just this week, for example, we heard that suicide rates amongst Aboriginal people are much higher, sometimes ten times higher in particular circumstances, than non-Aboriginal and we heard a rather peculiar research report about women's cardiovascular disease incidence where, again, Aboriginal women have much higher rates of cardiovascular disease. The researcher in the report on the ABC Radio programme that I heard, the first explanation was one of lifestyle choices, which I would've thought was not necessarily the first explanation you use for Aboriginal disadvantage.

However, tonight we're looking at safety and quality issues and I'll start this event by giving a brief overview of some work that I've done both for the Victorian Government and also for the Grattan Institute. Then I'll handover to Dr Robert Herkes, who's the Clinical Director the Australian Commission of Safety & Quality of Healthcare, he'll introduce himself and he's here in Debora Picone's debt, due to a family illness. Then we'll have time for questions, so we'll have a little panel session for questions at the end. As I said, I've recently chaired a review of safety and quality in

healthcare in Victoria and the report will hopefully be released in the near future. The report in Victoria was stimulated by a quality scandal at a hospital called Bacchus Marsh which is under the auspices of Djerriwarrh Health Service. There were a number of reviews of the service including they had found 11 deaths of babies were potentially avoidable and also the coroner, in investigating that, found significant failings in care. There was an initial review undertaken by Debora Picone and it looked at the way the Department had managed the response to that and basically said the Department's response was okay, with a caveat that I'll come back to in a few minutes. My review was established to look more broadly at issues surrounding the system as a whole.

In Victoria, and, to some extent in New South Wales, we have a system of devolved governance of health services, but the governance arrangements for health services have to involve three components. The hospitals have to actually have ownership of their health services and have ownership of the problems, but you also have to provide the Department and the government has to provide system leadership to set the directions for the whole health system and also to support services; thirdly, there needs to be democratic accountability and that has two meanings, one is accountability to the Minister who, after all, takes political accountability for the health services and also accountability to the public through the sharing of information. All of those areas need to be strengthened in our view. What our report was about in a sense was looking at culture and how were the safety and quality issues dealt with in the health system in Victoria, including in the Department of Health. What we've said there is a quote which is really about individuals, "the only thing of real importance that individual leaders do is to create and manage the culture" but it can equally be said of institutions, such as the Department of Health itself.

I said there was one caveat about the way the Department managed the Bacchus Marsh incident and this is an excerpt from the report that was done by Debora Picone. What we do know about many safety and quality events in this country is that they first come to notice because of either patient complaints or staff complaints. In Queensland in the Bundaberg scandal with Dr Patel, he was employed by Bundaberg Hospital for 22 months, the first complaint about him was six weeks after he arrived and there was essentially one complaint a month either from staff or patients, every month while he was employed. This was a complaint put in by the Australian Nursing & Midwifery Federation (ANMF) the union that covers midwives, and it's quite a detailed thing I know, but essentially in the first paragraph it said that Bacchus Marsh was functioning beyond its capability framework. The union complained that it was accepting mothers for delivery when they should've been referred on to a larger and more sophisticated hospital. But the real issue is in this one here where the complaint came to the notice of a person in the central part of the Department, in what's called the Maternal & Newborn Clinical Network, who felt that they couldn't do anything about it and so they referred it on. So they couldn't initiate any review and they thought the health service, which was being complained about, should initiate the review, and then they referred it on to the Department's regional office. The regional office rang up the Chief Executive and said, "What's up?" and the Chief Executive said, "Don't ring me, ring the Director of Nursing", which was a very peculiar thing, and then the Health Department rang up the CEO and he said, "Everything's okay, don't you worry about this" in the Bjelke-Petersen style and no further action was taken. So here we have a specific complaint where the Department didn't follow through with further investigations.

One of the interesting things that we looked at is about performance assessment and in Victoria there's a performance assessment scoring system and this is a subset of it. It scores health services out of 100 to decide whether they need further investigation and whether they're performing according to within the appropriate parameters. In the current scoring system 30% is based on access such as

waiting times, and if you're not managing within the waiting time guidelines you get marked down on that; 30% is financial sustainability, if you're not managing within your budget you're marked down on that; and then three elements which add to 40% about quality and safety essentially. So quality and safety is the biggest weighted item compared to the other two, but the question is do you think it's reasonable that a higher score on your finance means it's okay to have a lower score on quality and safety? I couldn't find a single Victoria who agreed with that assessment. So quality and safety is something different from the other two and it's really an issue of what does "good" look like. So what we know about finance is that if you're over budget that's bad, we know if we've got long waiting times that's bad, but what we want in a health service in quality is much more complex. Yes, we want them to have lower rates of things, but really we want a good health service to learn from their mistakes. Mistakes will happen, they will have high rates, but we want them to have an open culture where they start learning and they grapple with their problems and address them, which isn't amenable to scoring in that way. So it's really quite a complex issue.

So, as I said, all three elements of that devolved governance, democratic accountability and system leadership needs to be strengthened. If you're going to rely on boards to manage health services then you have to make sure that boards are good New South Wales has quite a different structure from Victoria, New South Wales I think has 17 local health districts, Victoria has somewhere in the 80s of separate boards, but one of the things we found that I think is relevant to New South Wales is that the skills assessment process for boards was, "Do you have this skill? Yes/No" without any indication of how you evidence that skill, what was an example of that skill? And what we said was, rather than a yes/no, you need to have a much more nuanced assessment, so here is an example of one for clinical governance, and obviously you need it for all the other areas as well, and "not experienced" might mean "no experience" - I've used the National Quality & Safety Standards as the reference point here – but have a marking rubric to say, "What do we think we mean by 'basic level of experience' or 'considerable experience' or 'extensive experience'?" so that there is a common language about what our expectations are. Then the next step along is to say, "We want to make sure that every board has at least one person who's is considerably experienced or you might say at least one person who is extensively experienced, where you draw the line is a matter of judgement, but you need to make sure that people understand and are able to be accountable for the level of experience that's on the board. So we want to strengthen boards and, as I said, that's an example where I think New South Wales might be able to pick up some of what we've done.

As I said, we've got a lot of hospitals in Victoria and each of them is reinventing the wheel. An example I give here is board reporting: what should a good quality and safety report look like when it's presented to the board? Double-entry accounting was invented in Venice, if you're an Italian, 500 years ago, I think it was called "merchant arithmetic" back in those days, if you're not Italian it was invented in Croatia, but about 500 years ago there was the development of double-entry accounting. Over that time we now know what a suite of finance reports would look like, you've got to have a balance sheet, you've got to have an income statement and you've got to have a cash flow, so there's very standard reporting of finance. There's no equivalent development and standardisation in terms of quality and safety, so what should the minimum reporting look like? In finance each health service might do it differently, but there's a basic framework that they all start with. What should a basic framework look like in quality and safety? We suggested a basic framework in quality and safety should look at a series of indicators, and I'll mention a couple of them in a minute, and should look at two components.

One is the second column here, your performance relative to a benchmark, say, relative to the rest of the state. The third column is how you're going relative to yourself. So in a single page we suggested you can actually summarise all of these indicators into those two columns. The importance of this is some health services are able to collect information about their performance relative to the state average, many can't, but all health services can collect information about local progress. So if you're going to populate a board report like this it's a matter of providing much more support and much more information. We've indicated there, I'll talk about hospital-acquired complications in a minute and I think so will Robert, a series of indicators that can be used to measure the performance of health services we think need to be used and made available to health services and, of course, you need to strengthen the information you've got and use it. When I say "you need to strengthen the information you've got" what you need to do if you're going to achieve change is put the information in the hands of the clinicians. In New South Wales they do that quite well with a portal and we're suggesting we do the same sort of thing, but there are other ways you need to provide information as well. This is from a study done by people at the University of Melbourne where they collected information from all of the health services' Complaints Commissioners across the country. What this graph shows is that if you're a doctor who has only had one complaint in the last decade or so the chances of getting another complaint in the next year are about 10%, but if you're a doctor that's had more than ten complaints in the last decade the chances of getting another complaint in the next year are almost 100%.

So the importance in that is who has that information? At the moment no-one does, this was done as a special research project. Should the employer, the board, the CEO, the Clinical Director, have that information so that they know which doctors are at risk of more complaints? This is just information from the Complaints Commissioner, what about the information about complaints that the registration board holds? What about the information about complaints that the medical indemnity insurance holds? So each person has an incomplete picture and we think it's really important that that picture comes together and is able to be used, so again that's an area that New South Wales could pick up on as well to collect that information and make it available. The second pillar that we looked at strengthening was democratic accountability and we think there needs to be improved transparency. Robert's got this slide as well, this was again a study done by the same group at the University of Melbourne of members of Victorian hospital boards and they asked them a couple of questions. One is obviously how do they rate the overall quality of care and the good news is all boards, all hospitals in Victoria are performing either about the same or above average, better or much better. Now that's really good news because you can be really comfortable about that, but it's a bit like Woebegone where all the children are above average. This sort of result is caused by the fact that they don't know how they're performing, they haven't been getting the feedback they need to.

This is Judge Louis Brandeis, a very famous American judge, who in talking about anti-trust law said basically, "Publicity is justly commended as a remedy for social industrial diseases. Sunlight is said to be the best disinfectant, electric light the most efficient policeman". So what we're talking about is putting much more information into the public domain. In New South Wales the Bureau of Health Information already puts some information about individual hospitals into the public domain. We think that would need to be considerably expanded. The Department in its work in Victoria focused primarily on individual incident reports and the same is true in New South Wales, the Clinical Excellence Commission focuses primarily on individual incident reports. They're important, but there are only 110 or so of them across Australia, very rare, whereas the new direction in terms of quality and safety is to focus more on the patterns and the overall incidence and rates. For example, in

Australia every patient who's discharged from a hospital has a set of diagnoses recorded and they record separately whether that diagnosis was present on admission to the hospital. So you can say these other diagnoses arose during the course of the admission, so-called hospital-acquired diagnoses. Up here we've got the list of the incidence of hospital-acquired diagnoses in Victoria, about 600,000 of them across public and private hospitals, and you can see the 20,000 or so adverse drug events, 52,000 or so post-procedural complications. They're all of them and that pattern is important, but the Commission of Safety & Quality of Healthcare has developed as list of hospital-acquired complications or priority complications, and Robert's going to talk a bit more about that. There are far fewer of those, but that's the subset which you'd expect to be able to reduce. The question that we have then is should that list, for example, be put up on the web quarterly or monthly or annually for every public and private hospital as to how many of those there were?

The third element is strengthening accreditation. Bacchus Marsh Hospital, Djerriwarrh Health Service was recommended for accreditation and there are a set of national safety and quality health standards which I think are quite good. I don't think they need to be adjusted, but the way you assess against them I think has a series of weaknesses. I'll just use this example here. So we see here that there were 21,000 or so specifically identified healthcare-associated infections. I think a better way of going about accreditation would be to say let's monitor how the hospitals are going and if a hospital has an elevated rate or is going upwards in healthcare-associated infections maybe we want to stimulate an accreditation visit just to see how they're going against Standard 2, which is the infection standard, on a random basis so they don't have three years to prepare. So a different approach to accreditation I think is warranted. The next element that needs to be strengthened is clinical leadership. Again, New South Wales has a much stronger system of clinical networks, you've got thousands of clinicians involved through the Agency for Clinical Improvement and I think we need to do the same in Victoria. We need to strengthen the Department and we need to strengthen the oversight of hospitals. Other examples of areas where we need to be looking, and I think again New South Wales can follow and learn from this, this is a study done of what's called a Whipple procedure. It's a fairly serious operation and what this graph shows is that mortality rate declines as the volume increases. In fact, what we know is every time someone's done a study of the volume outcome relationship in individual procedures they've found one. Sometimes it's not material, but every time they've done it they've found one.

This is the situation in Victoria, these are the hospitals that do the Whipple procedure and, as I said, there have been lots and lots of studies of the volume outcome relationship for that and the various studies have recommended a range of minimum volume thresholds, the highest of those is 84, you have to do 84 of those to guarantee a good outcome, and the lowest of those is 10, you have to do at least 10 of these to guarantee a good outcome. If you take the lowest international high volume threshold you've got a number of hospitals, both public and private, that are doing less than that. So the question is who should care about that and who should do something about that or should they? And what's interesting is there's both public and private and most of those are in the metropolitan areas, so you don't have the issues of access that you've got to worry about in concentrating the services. So in general in summary our report and the work we've done has recommended a broad set of changes about changing culture, improvement in oversight, improving governance and particular improving transparency to try and put more information into the public domain, to put more information into the hands of clinicians, to actually drive some change in the health system to improve quality of safety and care for patients. So I'll stop there and I think Debora's/Robert's slides are here and we'll move straight onto him. Thanks very much.

ROBERT HERKES: So again I'd like to apologise that Professor Picone has been unable to come, but at short notice she was called off to a sick relative so I'm going to give part of her talk and part of my talk. I guess one of the things I'd first of all comment on, my background is as an ICU doctor, I'm here because I started to sleep through telephone calls in the middle of the night having been on every second night for the last 30 years and decided that wasn't such a good idea and maybe I'd better get a bureaucratic job. So I went and got a bureaucratic job, but still work one week in four in the hospital system. Both Stephen and I have recently been on annual leave and this is a library not dissimilar to the library next door to us in Trinity College in Dublin. I went on my tour of Ireland because as a medical student I backpacked around Scotland and Ireland and what struck me when I went into this library that time was last century when I was in that library my camera didn't play music, my camera didn't have a phone in it, and my camera didn't have at my fingertips more information than all those books have. I put it to you that in fact the health system is still stuck in a library, we haven't gone yet to information technology and so a lot of the data we need to actually understand how to drive the system is there, but you can't get at it yet.

Stephen spoke extensively about the lack of information given to boards and I put it to you that as a senior clinician the only information I ever was given from my hospital was about the financial outcome in my ICU, not about the clinical outcome of my patients. What we need to do, in my belief, is to switch the system around to saying this system is here to serve patients and we actually need to reward patient outcome, not just numbers of widgets that you do for a patient. There's been an awful long lead-time coming to this. Back in the 1990s there was a sentinel event brought into place by the Joint Commission in the US and then in 1999 the seminal work *To Err is Human* was published, and that precipitated within Australia in 2002 COAG mandating the reporting of eight sentinel events. The eight sentinel events were plucked out of the air by a group of learned clinicians and they have in them some things that we definitely would still have there today, but there are some weird things, like sending a child home with the wrong parents, there's a lot of stuff about death of a lady peripartum, which might have been right in 2000 but these days the only deaths of peripartum women that occur are people who have got underlying chronic disease, like cystic fibrosis, who get pregnant deliberately knowing that they're at significant risk but they desperately want a baby and unfortunately, despite the best of care, occasionally those patients are lost. In 2004, COAG Healthcare mandated incident reporting systems, and we've heard from Stephen that they have been implemented but their output is variable and their influence on the system is very variable.

In 2013 COAG mandated the implementation of the National Safety & Quality Healthcare Standards, and while I agree with Stephen there are some issues around how accreditation works at the moment, we're one of the few nations in the world that actually has a set of standards everyone is accredited against, both in the public system and the private system and in day procedure services. Dentists are accredited against those standards and slowly other groups, including mental health services, will be accredited against the next set of standards which will be implemented in 2019. In 2016 this national reporting of sentinel events, at the moment the only thing that's nationally reported is sentinel events, so that's suicide in the inpatient unit, that's getting sent home with the wrong parents, that's wrong site surgery, it's retained instruments and so on, death of a perinatal woman and infection rates. Otherwise, there's no national reporting. So I guess 17 years later we don't have much data to drive the system, however we do know that the Australian health system, despite us criticising it at the moment, has extraordinarily good survival, Australians have the second or third highest longevity in the world, they have very good survival rates following cancers and cardiovascular diseases, and when you compare the Australian system with OECD countries we're always in the top few for almost

everything. But unfortunately improvements in hospital safety have been hampered by lagging disparate data systems, no uniformity and no reporting systems back to frontline clinicians, let alone boards.

So when you look at it, we've got national reporting and public reporting of sentinel events, they just come out in a report to government that happens to be two years out of date and everyone can easily dismiss the sentinel events because they're two years old, but at least they are publically reported. SAB rates and clostridium difficile infection rates are publically reported at a national level. Consumer feedback to health services isn't reported; it's collected at state and territory level but not shared nationally and not publically reported. Core hospital-based outcomes, so hospital-based standardised mortality ratio is collected at a state and territory level and a national level, but again not reported. Incident monitoring systems, in fact the reports of those have gone backwards, so historically New South Wales always would report its SAC1s, once a year there'd be a SAC1 report publically and in the initial years that caused quite a lot of consternation with lots of press, but as people got used to looking at that SAC1 report the noise around the press disappeared. Now unfortunately that's not published, some clinical registries do have public reporting but many of them don't. For those in the audience that don't know what a clinical registry is, often a group of clinicians, say, gastroenterologists will want to look at their comparative patient outcomes, so they'll get together to set up a registry to collect data on the things that interest them from their point of view about patient outcomes and share that data and risk stratify that data so that clinicians can work out where they stand relative to their peers. Mostly clinicians are very competitive and they want to improve and want to do better than the guy down the road, so it's a very good way of motivating people to improve patient-focused care and patient outcomes.

It's said that 1 in 10 in hospital in Australia are harmed while in hospital. Some of that harm is serious, so almost 1,800 people die of a complication of their hospital admission each year and 6,800 are seriously harmed by serious hospital complications. That represents a small percentage of the patients in the hospital system, but clearly it's a major number of patients, 1,800 patients dying as a result of some error in hospital. The major errors are medication errors, patient falls, hospital-acquired infection, deterioration and failure to respond, and in fact in some jurisdictions suicide makes up to 25% of the serious adverse SAC1 events, so suicide is a major issue. So these adverse effects add significantly to patients' lengths of stay and the cost of the patients' care and if we could do something to drive the serious adverse events down we would be looking after our patients better, we would be looking after our system better, and everyone would be much happier. The Commission a couple of years ago set about to look at how we might feedback meaningful information to clinicians on the frontline and what we decided that we didn't want to setup a new data collection system. So the case mix system collects ICD10s and within the ICD10s there's a series of hospital-acquired complications. We set up an expert group to look at those complications and they came up with 18 complications that they thought were serious for the patient, had serious implications for the health service and were largely preventable.

So the idea was that we'd use the administrative data sets to look for the compilations, we'd collate them and feed them back to frontline clinicians to say, "Did you know you had these five DVTs in patients under your care last month?" and the clinicians would then go and say, "Well in fact there were seven, what happened to the other two, why weren't they in the notes?" and start to look at did we have DVT prophylaxis for all these people, were we doing the appropriate preventative things to try and improve care, and in a minute I'll show you some slides about the results of that. That process was taken up immediately before the last election where the first Ministers, so that's the Prime Minster

and each of the Premiers of the states and jurisdictions, all got together and said, “We want to move our case mix funding system towards at least acknowledging safety and quality, so we want you to put into the case mix funding system sentinel events and we want you to put into the case mix funding hospital-acquired complications, and we want you to consider putting hospital readmissions into the funding system”. So that’s really from my point of view the first time safety and quality has been linked to funding and we’re hoping that will send a significant message to the system that they have to take safety and quality very seriously.

This is the hospital-acquired complications list and it’s things you’d guess, like pressure sores, falls, hospital-acquired infections, surgical problems and so on. When you look at the rates of those against age, the yellow there is infection and you can see that as you get older the rate of hospital-acquired infection increases significantly; the blue in the middle is delirium and, similarly, as you get older the rate of delirium increases significantly; and the orange at the top is cardiac complications, arrhythmias and so on. So the ministry of data analysed this way is sending a signal that looks plausible - rates of infection rise as you get older, rates of delirium rise as you get older - and when you look at the states they have approximately the same rates of these complications. Now there are confounders in there in that Victoria and South Australia have used case mix funding for much longer than some of the other jurisdictions, so they’re much more used to coding. So within New South Wales for instance there were issues with this thing called the condition onset flag which says the patient had the problem when they came into hospital or not, and that has significantly improved over the last couple of years in New South Wales as coded data, and so I would imagine that as time goes on the rates will normalise across all the different jurisdictions.

Are there any surgeons in the room? Well there we are, we’re lucky. You might all remember that the hospital-acquired compilations were taken up by Medibank Private as a way to restrict funding of private hospitals and there was a lot of politics around that. But one of the unusual, to my mind, outcomes of that was the College of Surgeons and Medibank Private started to publish data about individual surgeons and their patient outcomes. Now this is looking at the median length of stay in hospitals of Medibank Private only patients. Along the axis here is the number of operations that any particular surgeon did and on the Y axis is the median length of stay. Stephen was talking about the volume effect and you can see a volume effect there straight away, but there’s more than that. So if you look at the doctor who’s done about 37 radical prostatectomies, his patients stayed about two days so he used about 75 bed days to do 37 operations. If you look at that doctor that’s done 15 operations, he’s used a median of seven days, 15 x 7 is 105, so he’s used 105 bed days to do 15 operations versus 75 bed days to do 37 operations. There’s something weird going on, so that’s a patient outcome that’s sending a message about that surgeon. Now we don’t know whether the patients are more complicated, it’s not risk stratified, it’s not risk adjusted, there might be dozens of explanations for that, but there’s a signal there and we need to understand it. When you look at this, this is the hospital-acquired complication rate versus the frequency of operations and again you can see there’s a signal there that looks like that surgeon’s got very high hospital-acquired complication rates and that might explain the higher length of stay.

So what I put to you is that this is a thing called edge-notched cards. Does anyone in this room remember edge-notched cards? When I was an intern I worked with Professor Tom Reeve and he had kept all his data forever in edge-notched cards and the idea was you can see that there are holes all around the cards and you would decide one hole was for a patient that had a thyroidectomy and if the patient had a thyroidectomy you’d notch it, then you’d code another hole for post-op bleed and you’d code another hole for carcinoma of the thyroid. He kept every single patient he ever saw on

edge-notched cards so if you went and said, "Tom, how many thyroidectomies have you done that had carcinoma of the thyroid and had post-op bleeds?" he'd get his needle, put it through the hole for thyroidectomy, lift up the needle and all the patients that didn't have a thyroidectomy would come out and he'd been left with all the patients with a thyroidectomy. Then he'd put his needle through carcinoma of the thyroid and pull that out and you can see he could do a really sophisticated search. I put it to you that lots of what we're doing in medicine at the moment, in this day and age we're using paper records that you can't access, most of us don't even have the sophistication to have edge-notched cards, and so we need to move into that rather than stay back in the 1960s.

I guess our recommendation for achieving total system safety is not dissimilar to Stephen's, it's to ensure that leaders, both clinical management and board, establish and sustain an appropriate safety culture through strong governance. All the things that have gone wrong in our system, whether it be St Vincent's or Royal Adelaide or Bacchus Marsh, someone has come out and said this is an abject failure of clinical governance, and thank the Lord the journalists have never asked the Minister what does clinical governance mean because they wouldn't have been able to answer. The second thing is you need a centralised and co-ordinated oversight of the health system, and my view is if you're Tasmania how do you have a possible idea of knowing in your incident monitoring system what the significance of incidents are because you're too tiny to know? It's fine for New South Wales or Victoria because they're big jurisdictions and are going to have lots of incidents, but it would be much better to have a national system. So we think there should be a common set of safety metrics that report on meaningful outcomes in real time that are patient-centric and not just process-centric, and that we need to partner with patients and families for the safest care. We look forward to your questions.

STEPHEN DUCKETT: Thanks very much Robert.

AUDIENCE: I'm interested in patients and what patients are meant to know and what the transparency is around that. To take up your last point, there are disruptive technologies and apps galore helping solve problems in all sorts of other areas. Surely this is ripe for some sort of platform?

ROBERT HERKES: So the question is why is it not happening and it's not happening I think for a series of reasons. One is most of the apps are using a publically available data source and the publically available data sources don't exist. They don't exist because the attitude to privacy is one reason. So if you say, "I want to publish a report about patient outcomes from my abdominal aortic aneurisms" the ethics committees and the hoops and what have you that you have to go through because of concerns about both ethics and patient privacy and doctor privacy are extraordinary. So the Commission published an *Atlas of Clinical Variation*, I don't know whether you've seen that, it looks at variation in small areas, so looking at the difference, say, in antimicrobial prescribing in different parts of Australia, and there were unbelievable numbers of rules around the data sizes that we were allowed to publish to try and avoid disclosing individual patients or individual practitioners. That was down even to the level of, for example, Tasmania's got a single pathology provider, so there were issues around us publishing that and it had to be suppressed because of identifying that provider.

STEPHEN DUCKETT: It's a really good question and there are a number of comments I'd make. I used to be opposed to public information publication, I'm now not, I think it's the right thing to do and it's partly because of the experience in the US. What happened in the US was that basically patients didn't use the information that was in the public domain about differences in death rates and so on, but the hospitals did and the hospitals were worried about their reputations and being identified as a

hospital which had a higher death rate. So they actually started to address the problems and it drove improvements in quality and safety, even though, as I said, the patients didn't seem to use that information and nor did the family physicians. However, one of my friends is going into a hospital in the next couple of weeks for a hip replacement and we know that some hip prosthesis are more likely to fail in the next five years than others. My friend hasn't been told which brand hip prosthesis will be used and it seems to me we're now in a situation where it ought to be an expectation that he's told what brand it's going to be. More importantly, both Robert and I showed the hospital-acquired complications. The hospital knows that for 60 year old men, or whatever he is, who are having a hip replacement what the risk of infection is for him in that hospital. Now shouldn't he be entitled to know that and whether that's higher or lower than the hospital down the street?

Personalised information about what is likely to happen to him is available to the hospital and I think it should be available to the patient as well. We didn't say that in our report, but that's the sort of thing I think. It's the next generation of where we need to be.

AUDIENCE: I'd just like to ask something the stretching of resources across hospitals, particularly if they're not too far away from each other, and whether you need so much of it? I'm still mindful of the fact that after the death in about 2009 of a teenager who was struck by a golf ball her death was found to have come about by hospital bungles and that sort of thing, and the State Government then set up the Garling Commission which inquired into that and I recommended the closing of a number of hospitals Emergency Departments, including one over in Ryde where I was living at the time. There was a campaign to stop that, but I didn't join it because I didn't want to see the hospital at the centre of something like what had happened to the Campbelltown and Camden hospitals in the southwest where patient deaths had come about as a result of stretching of resources between hospitals which were relatively close to one another. How far do we go in terms of is it worth putting money into duplication or putting too many resources across hospitals which are so close to each other?

STEPHEN DUCKETT: So the Garling report recommended major changes to the health system in New South Wales and some of those structural changes are now in place. They recommended the Clinical Excellence Commission and Agency for Clinical Improvement, a Bureau of Health Information, and the so-called four pillars, the Training and Education Commission I think it's called, they're all in place. But the issue you raise is somewhat about hospital specialisation and somewhat about the accountability of the system. Again, New South Wales and Victoria have gone down quite different paths here. There are only two hospitals in Victoria that do major trauma. I used to chair the board of one of those, The Alfred, and what I knew was basically the evidence on major trauma was as you did more of them you had better outcomes, but once you plateaued at the devil's number, 666, that's how I remembered it and luckily The Alfred did more than 666, but in New South Wales you have more hospitals, this was the case when I looked at it in the past, and they weren't all doing the same number. So some of those recommendations obviously, I don't know the details of New South Wales.

ROBERT HERKES: I think my answer would be slightly different and I'd defend my bureaucratic colleagues in New South Wales to some extent. One of the problems in health is the intersection between local politics and good decisions for health. So you look at Manly and Mona Vale where forever each successive government have wanted to shut down the Mona Vale and local protests have prevented that, and a similar issue, Ryde is a great example, it's wedged between Royal North Shore and Concord and logically it doesn't need an Emergency Department, but politically it can't be closed. So there's this intersection between what is good health policy and what is local community

agitation for preserving their hospital. Now what New South Wales has been able to do, in their defence, Stephen showed a slide of Whipple procedure and in New South Wales that is absolutely rationalised, you don't have low volume centres. The State Trauma Plan envisaged decreasing the number of trauma centres in New South Wales, not as much as in Victoria because Victoria's actually very small and you can get into central Melbourne fairly easily from anywhere in Victoria, but nevertheless was going to rationalise trauma hospitals. That report was published and about a week later St Vincent's managed to get the report overturned. So there's an intersection between health policy and politics that sometimes means that what would be a sensible thing at a health policy level is politically unable to be done.

AUDIENCE: I'm glad to see you both talking about the importance of culture. Certainly in my line of work I know how difficult it can be to change the culture of an organisation let alone a system, so my question is what's the key thing that we can do as a system to try and change the culture around quality and safety?

STEPHEN DUCKETT: There are about eight or so policy levers you can use to change the behaviour of individuals or organisations or communities or whatever and those eight include things like consumer empowerment, and I think that's an important one, it includes things like financial incentives, it includes things like rules and regulations and information provision. But importantly one of them is what I call rhetoric or hortatory policy: just being different in the language you use, just starting to say, as the Hippocratic Oath says, "first do no harm", where do you place safety and quality, for example, in the hierarchy of policy goals and so on? So certainly an important component is sending the signals and leaders saying what they think is important, and there have been a number of studies, and I won't be able to quote them, which say what's really important is the CEO and the board showing leadership and the first standard is the governance standard, so that's important. Also making sure that your policies are all aligned, that you walk the talk, you send the financial signals. As Robert said, he quoted the COAG communique of April Fool's Day when the heads of government said that we're going to be using financial signals now to say, and what's come out since then, "If you have a sentinel event we're just not going to pay for the episode. That's tough, if you operate on the wrong leg we're just not going to pay for that anymore" is essentially the policy direction. Similarly, "If you have one of these hospital-acquired conditions one of the options is we're just not going to take it into account in the DRG assignment". So they're starting to align financial incentives with safety and quality and I think this change is slowly coming around and we expect to see it in the next few years.

ROBERT HERKES: I'd answer that with another little analogy. Also when I was in Ireland I visited a friend of mine, Dorothy, who's an intensive care doctor and she's moved from Australia back to Cork. Her husband used to be an international accountant, but for some heaven knows what reason he chose to go and get a job in a small Catholic hospital in Cork. When he entered the Catholic hospital he went to the accounts department and they proudly showed him the 35 years of black books, and the black books were a manual reconciled accounting of the electronic accounting system they'd kept in duplicate and he said, "Oh my God, what is this?" and said to the people in the accounts department, "You shan't keep the black books anymore". Of course they came to him and said, "We've been keeping the black books for 35 years, long before you were ever thought of, and we'll be keeping them long after you're a forgotten memory". He went away and thought this is interesting, so as the Chief Financial Officer what he did was trebled the number of transactions going through that accounts department and he was delighted at three months to have a delegation of people from the accounts department come to him and say, "We're really very sorry, but we're going to have to forgo keeping the black books because we can't keep up with the manual reconciliations". And I think one

of the problems in health is everyone, that's the doctors, the nurses, the allied health people, the cleaners, the ward assistants, the orderlies, everyone believes they have an equal say in what happens so there's autonomy everywhere. And autonomy is fine, but it has to be balanced by responsibility to the system and responsibility to the patient.

So I put it to you that part of changing the system is having managers that are smart enough to say, "Alright, I'm not going to have a fight over the black books, but I'm going to actually do something that will fix that situation" and often in health that's the way you have to approach problems. You often can't do it directly, you have to do it via the back door and I think that's a function of autonomy.

AUDIENCE: My question was about something that Dr Duckett said about how the number of complaints a clinician receives correlates with the likelihood of receiving more in the future. The system that we've got at the moment doesn't allow for complaints and incidents to be tracked like that, it's all anonymous. My questions is around the no blame culture and whether you think that that has shifted a bit too far and that people aren't accountable anymore when things do go wrong?

STEPHEN DUCKETT: I actually don't use the term "no blame". I think it sends the wrong message, so I use the terms "trust" and "trusting culture" and that is sometimes it is appropriate to assign blame. So when I was in Queensland we had a clear statement of what were blameworthy events and a blameworthy event, for example, was if a doctor came in drunk. So it is quite inappropriate, in my view, to talk about a no blame culture because there are blameworthy events, that's the first answer.

The second answer is we made it absolutely crystal clear that when investigating things that go wrong, we had a system of tracking 18 adverse events, for example, deaths from acute myocardial infarction in hospital, surgical compilations and so on. So we said if we identify that you've got a problem in your hospital there are five sorts of things you should look at. You should look at whether the data are wrong, whether you haven't recorded it properly in the record or whatever. You should look at whether we haven't adjusted properly for your case mix. You should look at whether there are resource issues which are relevant, and my favourite one of those was one of my staff was giving a presentation about readmissions after tonsillectomy. They were flagged as a high outlier, the hospital investigated it and discovered that they used to have a nurse who taught mothers and fathers about their kid after a tonsillectomy, that nurse went on holidays and wasn't replaced and, as a result, they got lots and lots of readmissions. Anyway, they told the story and the nurse was in the room and stood up and said, "I was the nurse, I can tell you that's a true story". What I liked about that story is she felt no problem about standing up because it wasn't her fault, it was a system failure, and that's an example of those.

There are other resource issues, but the final one is professional issues. It might be an individual professional who is actually not functioning as well as they ought. We had a trigger point that if you hit that you stopped the process of investigation under that path and started the process of investigation under that path to ensure you were holding people to account when it was appropriate to hold them to account. And I agree with you totally that you've got to have a system where people are held to account, you cannot sweep those individual issues under the table. Unfortunately I think you're right, there's just been a person who did a PhD on this in Queensland where the quality and safety reviews often sweep those things under the carpet and don't do it as well as they should, it's quite an interesting PhD. I think we do need to make sure that people are held to account when they ought to be held to account. You shouldn't start by saying there's a bad apple, but you should start by saying there may well be a bad apple and they should be held to account for that.

ROBERT HERKES: A couple of weeks ago I gave a talk to the registration authority in Melbourne at their annual conference and the talk was about where quality and safety hits regulation. One of the problems at the moment in the regulation system is there are lots of different bodies that have oversight of clinicians' behaviour, so there's your employee, there's the jurisdiction that Stephen just talked about, your employer, there's your college, there's your medical defence agency, there's colleges and learned societies, and at the moment none of them are hooked up. So if you're a doctor who has an adverse incident in a hospital and the hospital manager comes and gives you a stern talking to, if you're smart you resign and move somewhere else. That's at the moment. The registration authorities are looking at how they might hook up with all the other people that have oversight of quality and safety and performance for clinicians. There are other people that I forgot to mention, there are the Healthcare Complaints Commissions, there are the coroners, it goes on and on and on, but none of them are interconnected and that connectedness does need to be built so that the small number of practitioners that are real outliers are detected and either remediated or deregistered.

AUDIENCE: Any policy you're going to implement or any change will definitely have a cost element attached to it. How mature are we as a country in terms of our social and economic cost benefit analyst whenever we are trying to introduce a health policy? Because it shouldn't just be based on gut feeling or "I think this would be nice" or "I think he's a comfortably experienced person so he should be able to bring in some good". There's always good support for change if there's a good cost benefit analysis done behind that. Where do you think our maturity level is in that aspect?

STEPHEN DUCKETT: Robert presented data on that where adverse events add, whatever it is, 80% to the cost of a length of stay?

ROBERT HERKES: Adverse events increase the length of stay. The mean length of stay for hospital admissions in Australia is about four days and people that have a hospital-acquired complication have a mean length of stay of 16 days. So a patient who would've expected to be in hospital for four days ends up staying 16 days, which is clearly going to have a profound effect on that patient and it has a profound effect on the hospital costs around looking after that patient. So doing things to decrease that complication rate and decrease the harm to the patient and the length of stay will be both cost effective and the right thing to do for patient care.

STEPHEN DUCKETT: This leads to what I call the business case for quality, that you need to be saying being a good quality service actually is going to save money, not cost money. Then you have to ask do we know what it is to release –

ROBERT HERKES: What does "good" look like, yes.

STEPHEN DUCKETT: Yes, what does "good" look like and so on, but certainly the more we actually talk about the fact that you've got to be interested in quality and safety for a number of reasons. One, patients expect you to be interested in quality and safety, they expect to go into hospital and not be harmed, two, there is a business case for being interested in it and, three, there's no clinician in the country who gets up in the morning and says, "I want to go and make a mistake" or, "I want to go and hurt a patient". So the clinicians themselves are driven to pursue improved quality, especially if they know where they stand. Again, in Alberta I introduced a system where we provided feedback to the surgeons and I met with the senior orthopaedic surgeon in Edmonton and he'd just got the first set of results where we compared then I think on readmission rates. He said, "I've just got my results back" and I said, "That's good, how did you go?" "I was in the middle of the pack" and I said, "That's really

good" and he said, "No, no, no, no, I have never seen myself as an average surgeon". So this competitiveness is what we can use to improve things. So providing information is useful and it's quite cheap, but I think we can talk about this business case for quality and we ought to be using that information to actually justify or not some of the interventions we need to do to reduce adverse events.

AUDIENCE: I was a hospital pharmacist for quite a few years and now I work in the pharmaceutical industry on funding, so I'm quite familiar with cost effectiveness versus affordability and willingness to pay. My question is is it in scope to think about where the money's coming from? Because currently I don't think it's coming federally and I don't see how the states are going to afford much more given that institutions are already doing public appeals for funding and raffles and things like this. It seems to me that it would take some kind of co-ordinated lobbying and I don't know who it would come from.

STEPHEN DUCKETT: The good news is that the COAG decision of the 1st of April also endorsed a return to the Commonwealth putting back into the system, so the 1st of April decision involved a somewhat reversal of the 2014 Budget. They didn't put as much money back into the system as they took out, but I think they put enough in is my view and I've said that publically. So now and continuing into the future the Commonwealth is on the hook for 45% of the increase in activity, 45% of the increase in cost provided those occur at what they call the national efficient price. So there is sharing of the burden of growth in activity and so on, so it's not quite as stark. Now, it is also true that the proportion of state budgets that are spent on health is going up which means the proportion spent on police, transport or education has to go down. So this is a serious issue for states and we will have to revisit the funding arrangements between the Commonwealth and states sometime to address that. So the affordability issue that you raise I think is an important one, but it's not quite as dire as it was prior to the 1st of April of this year.

ROBERT HERKES: Again I'd point at the politics. Clearly when New South Wales Health wanted to shutdown hospitals that were small and probably not very efficient and probably had bigger, better hospitals within five minutes' drive of them it couldn't because of local politics, and we saw in the election what happens when a perception of changes to universal health insurance is perceived by the community, it becomes a major issue. So I think we're in a situation where politically the changes to health have to be incremental and sensibly argued.

STEPHEN DUCKETT: Using the data.

ROBERT HERKES: Using the data, yes. So I don't think you're going to see someone come out and say, "Righto, we're going to cut by 20% the spending on health". That's just not going to happen.

AUDIENCE: You mentioned earlier the importance of leadership and also referenced the greater number of boards in Victoria rather than New South Wales. Having moved from the UK, where we've seen a lot of board positions difficult to fill and a lot filled by people on a day rate basis because they don't want to take on a permanent basis, do you feel there's a need for mergers or things within Victoria to get the quality of people required?

STEPHEN DUCKETT: My take is that if you can't find a board for a hospital it really says why shouldn't it be run by someone else? Local autonomy shouldn't trump safety and quality, is my view. Obviously, as Robert will say, the politics of this are quite diabolical, but really we've got to be saying it's the job of the hospital board to run the hospital, but it's the job of the government to make sure

there are people who go on these boards who are competent to do that and you can't have a system where boards are responsible for running when they're not competent to do that. So that's why we had a lot to say about trying to improve the quality of hospital board members.

ROBERT HERKES: I'd answer it saying that as an intensive care doctor from New South Wales in this new job I go around Australia and look at some of the aspects of healthcare systems in other jurisdictions, we've got supposedly one healthcare system but there are about eight or nine iterations of it. So New South Wales is vastly different, as we heard, from Victoria, but it's also different from Queensland, Tasmania, South Australia and the private system. They're all different and what my view is in the medium term we need to have data across the whole lot so we can work out which aspects of which jurisdictional system are better so that we can start to harmonise those systems. But at the moment they're all vastly different and because they're different they have different benefits and different detriments to those populations. So in New South Wales, every doctor within the public system has a purview that is a state purview rather than just a "my hospital" purview, they have responsibilities for rural and regional hospitals outside of their big teaching hospital, their cathedral on the hill. In Victoria the focus is very much on their own hospital and that's meant that things like research in Victoria are way better than New South Wales, but if you're at Albury-Wodonga or out in the sticks the care you get when you've got something ugly is different to New South Wales.

So I think there are checks and balances. All the systems are different, they all have good bits and not-so-good bits and if we could get uniform data and actually work out what is driving the good aspects of the Victorian system and the good aspects of the New South Wales system and the good aspects of the Queensland system and the good aspects of the private system we could actually overall get a much better health system for everyone.

AUDIENCE: Interested from both of you talking a little bit about potential for the private sector to be the disruptive change. I think we've seen that both on the payer side with Medibank Private and the work they've done with the College of Surgeons, but there are also I think things going on in the private hospital sector, for example, greater focus on PRONE and various things.

STEPHEN DUCKETT: I think publication of individual surgeon results will occur in the private sector before the public sector and I think it will occur within the next few years. I think publication of individual hospital results is already starting here in New South Wales on a limited basis, I think it should go much, much further across both public and private, but I think publication of individual surgeon results by the health insurance funds will come sooner rather than later. Private hospitals themselves, I mean, in the case of patient-reported outcome measures it's very idiosyncratic. So sometimes public hospital orthopaedic units collect that information already, sometimes private hospital surgeons do it as well, but because of the very funny relationship between doctors and private hospitals I wouldn't be holding my breath for major change there for a while.

ROBERT HERKES: Again, I think the private hospital system has a whole heap of things that are good and a whole heap of things that aren't so good and some of the hospital groups are starting to get really good intelligence about their hospitals and what's good about each of their individual hospitals, they're intervening and starting to look at how they might improve their more poorly preforming hospitals from a quality and safety point of view and bring them up to the standard of their better performing hospitals. I think that's a good thing. My vision is that all that data should be across the whole system and we should be pushing everyone to improve, but certainly there are aspects of the private hospital system that are really exemplary.

AUDIENCE: A lot of the data is looking back. With more information I'm assuming we'd be able to build more predictive analytics into quality and safety, is that a worthwhile goal or not?

STEPHEN DUCKETT: Yes, I certainly think so. So the PRONE score, the complaints and predicting the number of future complaints based on past complaints is a leading indicator and obviously when I talked about what hospitals can do about saying you're a 65 year old man who's about to have a hip replacement, what's likely to happen to you, you're also beginning to be able to do that now. So yes, but what Robert has been saying over and over again is we've got to get this data out, we've got to get this data at a national level and we've got to be able to compare between states. So I think it's a walk before you run issue.

ROBERT HERKES: Yes and another way to look at this, I've got a friend who's going into hospital to have a baby and she wants to know what the caesarean rate at that hospital is.

STEPHEN DUCKETT: We know; private hospital is higher than public hospital.

ROBERT HERKES: But you don't actually know what the caesarean rate in an individual hospital is and that's the sort of transparent stuff that should be out there, in my view.

STEPHEN DUCKETT: Thank you very much for coming tonight and thank you for the questions, they were good questions and that's always one of the things you like about events like this. This will be available on our website as a podcast in due course. Thank you all for coming and I hope you found it useful, thank you very much.

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