# Making the most of technology in healthcare

## Webinar transcript

**Emma Hoban:** Welcome everyone. Good afternoon. I'm Emma Hoban, manager of the Australian Centre for Value based Healthcare at the Australian Healthcare and Hospital Association.

Welcome to today's webinar *Making the most of technology and healthcare* delivered in partnership with the Productivity Commission.

I'm joining you on the lands of the Ngunnawal people and pay my respects to Elders past, present and emerging. I would also like to acknowledge and pay respects to the traditional owners of the many different lands on which we meet today and recognise their continuing connection to land, water and culture.

We've partnered with the Productivity Commission today to discuss their latest report, *Leveraging digital technology and healthcare,* which finds making better use of emerging technologies could ease pressure on the healthcare system and save over \$5 billion a year.

A technology enabled and data informed approach is important for decision making at all levels of the system. Whether this is to support shared decision making at the level of the consultation; for quality improvement in a service; for resource allocation; or to drive health system improvements across the entire system.

We know that governments and organisations are investing significantly, but are these investments achieving value and how are we learning from the experiences of implementation?

Today we are joined by Productivity Commissioner Catherine de Fontenay to provide an overview of the findings of the Productivity Commission's research. Following this, we will be having a panel discussion in which Catherine will be joined by Simon Hill, Co-Chair of the AI Council at the Northern Sydney LHD, former Chief Information Officer of the Northern Sydney and Central Coast LHDs and now a general manager of the Hornsby Hospital; and Kylie Woolcock, chief executive of AHHA. So, over to you, Catherine.

**Catherine de Fontenay:** Thanks so much, Emma. Thank you all for joining today. I'm really excited to talk about our report. I'll just ... there we go. I'll just to quickly share my screen. Thank you all for your patience. So, I'm very excited to talk about our report. But in true government fashion, I'll start by telling you about another report that we wrote. So, at the same time we released a report on productivity in healthcare and found that although we're all very alive to the challenges of our healthcare system, actually productivity is growing amazingly well in our healthcare system.

We found productivity growth of about 3% per year, which is well above the productivity we see in more commercial sectors of the economy. We also found that we outperform peer countries where third in a group of about 28 comparable countries. So, that's really exciting and very good news about our healthcare system and a lot of that is due to improvements in healthcare outcomes, specifically improvements in mortality rates from different treatments. And that's very exciting, but unfortunately it doesn't address the many challenges that we have on the cost side. So, as we know, we're struggling with growing costs as our population ages and as healthcare gets more expensive, increasing wait times, which are regularly in the news. And challenges to ensure equal access.

So, in that background, we took a look at digital technologies because we feel that they really have the potential kind of for the first time in a long time we have some technologies on the horizon that really have the potential to make a big difference to that cost and access side of the equation, and so it's worth taking some time to think about how they can help us.

We took a look at four main areas. We looked at electronic medical records; telehealth; remote care which is remote, patient monitoring and digital therapeutics; and artificial intelligence. And again, they have a broad range of impacts, but probably one of the biggest is there's real potential to lower the costs of healthcare and reduce the pressure, particularly pressure on our hospital system. And that means more affordable and better health care. They also have the potential to improve the quality of health care in certain dimensions and to reduce the cost and increase convenience for patients. So, a lot of very exciting potential on the horizon.

We had a go at quantifying those potential benefits in a few of the dimensions, and they're pretty substantial. So, from the point of view of consumers, we estimated that just looking at levels of telehealth that we're currently undertaking, we're saving about 900 million a year in travel cost and waiting cost in waiting rooms at GPs and hospitals.

We found that in terms of good electronic medical records, have the potential to save many millions in duplicate testing and imaging and allow us to better manage our hospital resources, efficiently discharge patients that could potentially save us up to about 5 billion a year.

And the really huge benefits that are on the horizon are in artificial intelligence. So, the OECD estimates that up to about 30% of the tasks that our health workforce undertakes could be done by artificial intelligence and other digital technology. So, that would be a saving of about 11 hours each week for every health worker. That's time that we can use to deliver healthcare to our rapidly ageing population.

So, these are really exciting numbers in terms of the potential for these technologies. But as we all know. It's not clear that they are being used to their full potential for the moment. Clearly, AI is not, but even more established technologies are not reaching their full potential, so we had to look at that in this report.

So, turning first to the issue of the most vexed issue, electronic medical records. So, there we really see that we're not living up to our full potential. A lot of hospitals are making investments in

EMRs and are folding them into their own workflow quite well. The part where we're not really achieving synergies is in terms of sharing information between providers and that is critical. So, for example, hospital discharges, if they're shared with GPs in a quick and effective way that reduces the risk of readmission by 79%. For example, health medical records need to be shared to reduce medication errors. But as we've all experienced health information in Australia remains fragmented. It's in silos, and those silos don't speak to each other very well.

Now *My health record* was intended to be the solution to that problem, but unfortunately it has yet to meet our expectations of a kind of final repository of most of our health information. So, *My health record* suffers from incomplete information because individual providers make decisions about what to upload and when. It suffers from patchy coverage and even when the information is there it's awkward to use. It's been described as a shoebox of PDFs, so not ideal in terms of usability and as a consequence we are in what economists call a coordination problem. We have people not uploading to *My health record* because they're not seeing the benefit of it, and we have providers not looking in *My health record* for data because they're not sure they'll find what they need. And so, we see low rates of viewing of records, and we see that use is particularly low among specialists and other types of certain types of providers.

Moreover, we see that a number of States and territory health systems are developing their own health system. There are often several states are developing an electronic medical record for the public hospital system, and often they're setting that up so that different hospitals can communicate with each other. Which makes a lot of sense. But some of those systems are starting to think about how they communicate with other parts of the system and essentially are kind of duplicating the role of *My health record*. So, those public systems are interfacing with GPs and community health, and we're starting to see duplication of these same functions.

We also haven't had those fights about privacy regarding these new systems, and so we have this crowded space, and we potentially have a lot of duplication of costs. So, it's looking challenging, shall we say.

So, we still think that *My health record* has a really important place to play, an important role to play, and we think that. It's important for us to focus very much on the basic information that needs sharing, so information on discharge, summary uploads for public hospitals and for private hospitals. We need to ensure that all of those are in our *My health record* so they can always be accessed by our GP.

We need medication information, including for non-PBS items, to be available in *My health record*. But really, if you think of the key information that you need when a patient moves from one system to another, it is: what medication am I on? What happened when I left hospital? What are my current diagnoses? It's not a huge range of information and so my health record is well positioned to play that role for all of us.

That basic information could be automatically uploaded by software if we had the right incentives for software providers. We need some coordination, and we need to sort of keep our focus on some simpler elements of the system.

We also took a look at telehealth. So, this is a more positive picture than electronic medical records. So, it has been a huge transformation that we've all been through since COVID. And the exciting thing is that telehealth is now a large and fully accepted part of our health system.

So, one in five GP consultations is via telehealth. One in 10 specialist consults is via telehealth. Alongside that, we have a direct-to-consumer telehealth system telehealth sector that has emerged.

So, we have companies that are now providing fully online medical GP visits for consumers. These are generally not MBS covered and this sector has grown very fenced and essentially, it's the consumer analogue of what they are benefiting from in other sectors.

It's the Uber eats, it's the convenience at your fingertip, and consumers have shown that they're happy to pay for this new service.

Meanwhile, hospitals are innovating and providing more services via telehealth, both to reduce pressure on the emergency room and to discharge people sooner, but also to provide support to regional healthcare services.

And then we have supported consultations from regional and remote areas, particularly in ACCHOs – Aboriginal Community-controlled Health Organisations – where Aboriginal health workers might sit with a patient and support them during a consultation with a city specialist.

So, these are extremely exciting developments in terms of improving access to access to healthcare and we kind of have two big trends happening at the same time. On the one hand, convenience has increased for all of us. We talked about those reduced, those big savings in terms of time and travel. But also access has improved for groups with less mobility, who find it hard to get away from home, regional and remote patients. And so we've got some exciting trends going on there.

So, we think that policy settings here need to kind of carefully monitor and adapt to this evolving, evolving market. We have these new providers, these direct-to-consumer providers, who have very new ways of doing business and we think that there's potentially some gaps there in terms of standards and accreditation for those new providers. A lot of our standards and accreditation assumes that you are receiving MBS funding for your activity? They don't fall under the normal definitions of GP services, and so we need to make sure that they're covered by our standards and accreditation.

We also need to work out whether we're happy to have bundled services in this online, so some services that are being offered seem relatively low value, such as diet services or hair loss

services. Do we want PBS funded services to be part of these online services? So, it's a fascinating and rapidly moving area.

Meanwhile, we have got rules that are in place, partly to limit the cost for the government of this new direct to consumer segment of the market. We have the 12-month rule, so you can receive MBS, an MBS fund, MBS funding for your consultation if you have seen your doctor face to face in the last 12 months, so that rules out these fully online services. But it also potentially rules out access for some disadvantaged groups.

So, if I'm a remote patient and the nearest clinic is a long way away, and I don't see them very often, I potentially don't meet the 12-month rule. If my local clinic is completely full for the next six weeks. I will be trying to see someone else, and I don't meet the 12-month rule, so we want to look at who are these high needs groups who perhaps need relaxation of the 12-month rule so that they have good access to telehealth.

It's perfectly reasonable that people in the city who are wanting additional convenience should pay for that convenience, but we want to make sure we're maintaining access and we're increasing access for these groups who can really benefit from telehealth.

Another thing we heard in our consultation is that regional and remote providers are very worried about some of the potential implications of telehealth. They're worried that as more telehealth options arise, governments may put less effort into finding healthcare workers for those regional and remote areas. And again, that's very expensive and a lot of work to find healthcare workers. And we are in a healthcare shortage in those areas, they're worried that those shortages will get worse if governments invest in that less as they as telehealth options come up. So, that's an area where we need to watch this space carefully and make sure we see how this is impacting remote areas.

Moving, continuing with the theme of remote care, so here we're talking not so much about remote areas, but care that is happening in the convenience of your home. So, telehealth is one dimension of that, but two new and fascinating dimensions of remote care are remote patient monitoring.

These are devices that track a patients biomarkers. So, this is probably the most exciting one is devices that allow you to monitor a diabetes patient's insulin levels and make adjustments to those insulin levels. That is a game changer in the insulin, in the diabetes space and very exciting. It helps clinicians detect escalations in patient conditions, particularly if you're sending someone home with monitoring devices who's just been discharged from hospital. You can tell if their condition is worsening. And that's going to keep people from being readmitted unnecessarily to hospital.

Then we have digital therapeutics. So, these are apps essentially that help, for instance, with cognitive behavioural therapy. They've been shown to be very effective for certain types of psychological treatments. There's apps that help with rehabilitation from a cardiac event or a stroke, a number of different areas where apps have been shown to be effective, and again they

scale up very well. They free up clinician time, they have a lot of potential to help out in our health system.

So, here this is sort of an emerging area. We found that 19% of GPs had introduced some form of monitoring of checking on their patients, while 26% planned to introduce some in the next two years and this can be very high tech, or it can be very low tech. I spoke to one doctor in remote South Australia, who had patients who were 10 hours away with gestational diabetes. She was just having them phone in their insulin results and making adjustments to, phoning their blood sugar results and making adjustments to their treatment.

We, in terms of digital therapeutics, it's a little bit harder to tell what's going on. There are tens of thousands of apps, only about 31 are TGA approved, but 74% of GPs in 2018 – so even before COVID – recommended some form of app to their patients. There are apps for sleep, there's apps for exercise, there's a broad range of options here.

And then when there has been MBS funding for a specific area of monitoring or a specific type of app, their uptake has been more widespread. So, again, the funding settings make a big difference here to how quickly this is going to catch on.

So, we think that the benefits of remote care could be better captured. We want to help consumers find quality products, especially in this app space. How can we let them know what is a good product and what is bad product? There's very little information out there when you start searching for apps. And we think that targeted funding arrangements could ensure that we get high value care. Remote care doesn't always fit in our broader funding models. There isn't always funding for undertaking monitoring of a patient. There isn't always of funding for prescribing an app relative to, say, a mental health plan. And we think that high value interventions. With good clinical evidence could be funded, but also in ways that reward patient adherence. So, lots to be done in that evolving space.

Last thing we want to talk about is artificial intelligence. So, again, there's huge potential there to make a difference. So, we mentioned that up to 30% of tasks could be automated. So, that includes non-clinical applications such as transcribing my notes, consumer engagement. Helping people to check in, helping people to receive information they need prior to a treatment. There is using AI in diagnostic imaging and screening. I think we're all pretty excited about the potential for AI to detect the cancer where it might be missed by another person and clinical decision support. So, software that assists us providing that background information about what has been prescribed for people with similar conditions. So, that's very exciting.

At the same time, we can make better use of our resources by analysing the data currently in our system and making better predictions and better resource adjustments. So, discharging patients efficiently when they're as early as they are ready to be discharged, identifying which patients in hospital are likely to have their condition worsen. Identifying which patients that we discharge need following up. South Australia has found that that really reduces the incidence of rehospitalization. So, a number of areas where we can improve our predictions and improve our processes with AI.

Again, the debate is very live all around us. Al does bring it many risks, risks around data quality, privacy and security. Security of our health data. We're worried about decisions being taken by a black box process, so there are risks there and we need lots of information and lots of cheques and balances.

Interestingly, Australia has very low trust and confidence in AI, particularly AI in health. Only 27 to 43% of Australians support the use of AI in health, so we have lots to do to restore confidence in this sector. And some of the some of the reason is we have uncertainty about how effective our regulatory frameworks are in protecting us in supporting us in this space.

So, what do we think should be done? Well, in some places we actually need a little bit more regulation just to reassure us and to provide that confidence. The TGA has an approval regime exemption for clinical decision support software. If the AI is making the decision, then you need TGA approval, but if the AI is simply recommending a decision, you need notification of the TGA but not approval. So, we think that probably needs some tightening up as we transfer gradually more responsibility to these AI systems.

We also want more formal follow up of any AI system that evolves overtime. And we think that we need privacy safeguards. We need lots of clear consent processes that are going to encourage people to share their data and know what is happening with their data.

So, that's pretty much it. I'll stop there. But in short, there's lots that is very exciting in this space and we think that it's we think that there's huge potential.

**Emma Hoban:** Thanks so much, Catherine. So, now we're just going to bring in our other panellists, Simon and Kylie. But first I'll just let you know that we do have Q&A function at the bottom of the screen. So, if you do want to ask any questions I've seen, we've got a few coming through already, please feel free to put them in and we'll get to them when we as we progress through the discussion. So Simon, I'd now like to start with you. Can you tell us a little bit about yourself, your background and some of your work that you're involved in around embedding digital technology and healthcare in the use of AI.

**Simon Hill:** And good afternoon, colleagues. I come from [muffled] country here at the [muffled] hospital. It's my first to come and talk to the group today. I've been in health for the public health about 25 years and in a variety of roles started with clinical informatics and redevelopment projects and have been at the CIO.

So, and more recently, general manager of a of a busy and growing hospital, I think the use of technology health – I see people saying they can barely hear me, I'll hold this microphone up to my up to my mouth – it's really evolving. I think there's opportunities, lots of opportunities within health.

We were only paper based, you know, 10-15 years ago. So, there has been this real acceleration in digitalisation within the healthcare, but we really are only scratching the surface really interesting to hear some of the comments and of the report that definitely talked us through around where those opportunities may be. I think there certainly are pockets of excellence in that space that

reflect on some of the things that we're doing at the moment around voice recognition, investment in documentation and records, but still a long way to go. So, I think lots of opportunity there for us and then look forward to what the future may hold in that space for us.

Emma Hoban: Simon. Kylie, can you tell us a little bit about AHHA's interest in this area?

**Kylie Woolcock:** Yeah. Thanks so much, Emma. And thanks, Catherine, for your presentation on the report. We really appreciate the opportunity to contribute and also to connect you to health services as part of your exploration. So, at AHHA, we're really interested in that collective action that's needed. The action that you know will drive that improvement in health systems that no one part of the system can do in isolation, and I think technology is definitely one of those spaces.

We're really interested in, you know, understanding what are the efficiencies that can be gained through a national approach while also recognising the very unique environments across our country in which healthcare is provided. So, how do we adopt digital technologies in a way that really recognises those circumstances, and I think you know, you raised rural and remote in that context as well, and that's an area that we're working a lot out because we do understand that at a community level that importance of technology to enable access to healthcare, but also recognising, as you mentioned, there are a number of providers coming in who don't form part of that system.

So, you know, thinking about what's that continuity of care. And we know that that informational aspect of continuity is one part, the management is another, but the relationships that happen on the ground is another part that we have to be really cognizant of. And technologies can certainly support that. But it's a whole system approach. So, so that's where really where we sit in the system in terms of trying to connect that local context in the adoption with the national policy that's being developed to support this.

And alongside that is really understanding. You know, how do we do this to drive value? And so recognising that there are so many different parts of the system that support that from health technology assessment processes, to our pricing bodies, to our safety and quality Commission. And you touched on all of those as you as you ran through your report about you know the accreditation systems and things that sit with that as well.

And that's a third part of our interest, which is really where this webinar comes in as well as around how do we create that learning health system around the adoption. You know we know that you know research to practise is being proposed to take, I think 15 years it's improved since the 17 years since I think you know one of the older reference points that we used to use, but how do we do that better? How do we use and we've been looking at how do we use a value based healthcare framework to really do that sort of forensic analysis of, you know, understanding the outcomes and I think a question came around is around that around how do we have that transparency and the outcomes that we're actually achieving for the costs and they're invested but also reflecting the context. And that's where we come up from at AHHA and I'll be listening intently to people's questions and the feedback that we get today.

**Emma Hoban:** Thanks, Kylie. So, there a lot of questions coming through the chat. So, we might start there. Catherine, you spoke about the incentives. Are you seeing any new approaches that might emerge to enable the system to evolve, whether it's taking new service models, a reimbursement or digital information flow? [Unclear] or high market [unclear] market.

**Catherine de Fontenay:** Uh, we are seeing some innovation and certainly so for example in in remote monitoring and digital therapeutics which are probably these categories where our normal funding models kind of don't fully incorporate it. I think the system, I think. Health is, Department of Health and other actors are looking and learning. So, we have the privilege of visiting the Royal Prince Alfred Virtual Hospital, which is quite a remarkable innovation. And there you know both sort of state and federal are taking a look at what are the savings that we're seeing. What are the places where we're getting better care, where people are happier with the care because they can have care in their home? And so we're seeing. We're seeing that that, that, that kind of watch this space as people observe and sort of work out what are the right funding models for this new type of care.

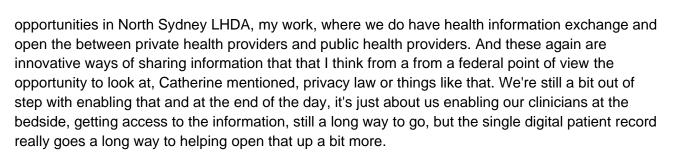
With remote monitoring, though, there are some lost opportunities. If we're not kind of paying attention to what is delivering high value care. So, again, I mentioned diabetes monitoring as one of those real game changers that is available for patients who have type one diabetes can be is receive support through the through the PBS system I believe, but the but type 2 diabetes patients, even ones who have quite difficult circumstances and find it very hard to manage their own diabetes, even those types of patients, cannot access these remote monitoring technologies. So, we do want to continue to build that clinical evidence base of where these technologies. Make a huge difference to the quality of healthcare.

**Emma Hoban:** Thanks, Catherine. Simon, you're sitting at the point of implementation being the general manager of a hospital. Are you seeing any new approaches that might emerge to enable the system to evolve?

**Simon Hill:** Yeah, absolutely. I think the greatest potential for change is health is embarking on the journey around the single digital patient record. And I really think that this does provide significant opportunity to build through some of the silos. Catherine, I think you talked about. When I talked to clinicians today, one of the key frustrations they have is so much information that goes into the system, but we're still really unlinked. I think the example with the NSW Health is we have 10 different instances of an electronic medical record that don't necessarily talk to each other, and the signal digital patient record really is going to open that up for us.

But I think the other thing that's going to do is create a common platform for us to not just enable our clinicians to unlock data sets that now they might need to go into multiple different information systems to access but to build on top off. So, I think it opens opportunities around AI around its operability and things like that. So, that's a that's a big, big point.

The other thing that I'll just reflect on is we talked again before is how we're linking with partners with community care providers, primary care providers who can help them public and private



**Emma Hoban:** Thanks Simon. With digital technology and AI representing such a broad range of technologies, how important that we move away from the tendency to lump them all together in discussions and become more specific about which technology and AI will result in productivity gains. Kylie, did you have any thoughts on this?

**Kylie Woolcock:** I see Catherine nodding so, I'd love to hear her thoughts ha! But I do see that and I think you know with AI, there are some elements of, you know, the use of it that can sit within individual clinical groups. So, you know looking at, say, radiology, you know, but there's a lot of administrative workloads that can that spans across our system which have, you know, they have very different risks and very, very different safety and very different, you know, funding implementation consideration. So, I think it is really important to be thinking about AI quite broadly and but be quite specific when we're talking about how we implement AI. That there really are, you know, very different implications for the different types of technologies that are being introduced.

## Emma Hoban: Catherine.

**Catherine de Fontenay:** Yeah, I fully agree. I think we're because we're now at the pointy end. We need to talk about each of these technologies separately and figure out what we need in in the policy space. On AI, I fully agree with Kylie's comments. So, some types of AI are using data that is not actually sensitive. You know what time did you check into the clinic and have you done your pre, you know, this particular check before the surgery? Other types of data are highly sensitive and are going to need really different treatment. Some data is not. Some data can be put into a data set without risking the patient. So, if we have a number of chest X rays, they can be in a data set without that violating my patient privacy for example. So, we have a number of, a number of directions we need to move in and they do look they do look different for each technology.

## Emma Hoban: Thanks, Catherine. Simon, did you have any thoughts?

**Simon Hill:** Yeah, I'll say again, we've only just recently started AI council cancelled for the [unclear] for our clinicians to be involved in. I was actually, we're quite blown away with how many people are interested. I think the other side of it is that there isn't a literacy around AI and digital literacy. I think that's something that we as a workforce within health need to invest in, the language of digital, the language of AI. It can still be quite confusing. It is scary to people what it might mean. And I think that we're still quite foundational in that. But absolutely opportunity. Interested there. I'm always amazed with. Our extremely brilliant smart clinicians and the ideas that they have around providing the very best experience for patients and often technology is part of

that. But I think building the technology and the skill set around digital, you still got a fair way to go with it. If you think about you know the nurse on the ground. Care busy day. Hundreds of people come through ED, our ability to ensure that we effectively manage that change and support our staff in basic digital interesting. We still got a little way to go there, but absolute opportunity for us.

**Emma Hoban:** Thanks, Simon. That leads into a question around workforce. We've had a few come through the chat. Around the need for training and how do we embed these models into business as usual without burdening a burnout workforce. So, I suppose more generally, what impact do you see the growing use of technology having on the healthcare workforce, I'm not sure. Simon, did you want to start with that one?

**Simon Hill:** Yeah, absolutely. I think in health, we're good at investing in the system or the tool, but we need to do, we need to do better, do the change and the change. I think as we become more digital, the requirement, you know, building our workforce around soft skills, around digital skills, I think is really important. I think we need to invest in change significantly. We do that, we do that quite well, but we could do better.

I think the other opportunity for us is to be really honest and open about what we expect around the [unclear]. And I think that's a bit of an opportunity for us as well. It's that you've got the patient benefit and outcome which sometimes can be hard to measure in a dollar. But we know through digitization if I'll give you an example. You know, digitisation of our medication management systems, we see great benefit around reducing wastage, improving the outcomes. But in terms of when we when we talk about the need for accessing systems.

The clinicians, my clinicians, keep telling me that they're spending more time in front of the computer than they are in front of their patients and ultimately. We still need to get to that balance where you know we're using the systems, we're using our technology to get these great outcomes, but it can't be at the expense of time placed on the patients. So, I think there's still work to be done in that space and I think managing the change is a key part of that and supporting that change.

Emma Hoban: Catherine, did you have any thoughts?

**Catherine de Fontenay:** Yeah, I fully agree with that. And it is a big investment to sort of come up with a system that is actually usable by health workers. The benefits that we measured, for instance, for EMRs, for electronic medical records was from a hospital that already had an electronic medical record but had improved as their system and developed something in consultation with their clinicians that really worked for the staff and really allowed them to not bear such a huge impasse.

The other thing I'd say is that we're suffering from we have a we have this burnout and we have a lot of people leaving the health profession, the ability to work from home is a non-trivial way to keep people in health who perhaps need to make a lifestyle change, need to make a change for personal reasons, but perhaps would still like to be involved. We heard of doctors that had been in remote areas needed to move back to the city for personal reasons but were still able to provide a

lot of telehealth support to their old clinic, for example. So, I think that that telehealth does offer possibilities, not just for patients, but for practitioners.

**Emma Hoban:** Thanks, Catherine. So, another question here from the audience. I know that there was very little specifically dedicated to digital health in the federal budget. Does the Productivity Commission expect the government to provide a formal response to your report.

**Catherine de Fontenay:** No. This is self-initiated research, so they're not obligated to provide a formal response. As we've mentioned, there are some cost savings as well as in the upfront investments that have to be made in this space. So, there are, it's not, it's not clear that this is an area where we're going to need huge additional outlay, but it obviously depends on the specific technology.

**Emma Hoban:** Thanks, Catherine. There are a few questions coming in through the chat about the role of integration. And the appetite of the states to kind of engage in a more coordinated response. Which kind of links to one of the questions that I had for you. What role does the forthcoming National Health Reform Agreement have to play in a more effectively supporting the integration of digital technologies and AI in the health system? Kylie, I'm not sure. If you wanted to take first stab at this one.

**Kylie Woolcock:** Thanks, Emma. Look, I think it's got a critical role to play, so let's hope that it does play out when we, I think we're imagining July, we might hear something about where that's heading. Yeah, I think, I mean it, it's critical. Technology can't be implemented in isolation of the States and territories and the Commonwealth, simply because patients don't experience healthcare that way. You know these are artificial divisions really and how we, you know, arrange our healthcare system and technology needs to really support the care pathway that a patient experiences.

**Emma Hoban:** Simon, I wonder if you had any thoughts on being at that state level, whether the appetite of the various states to come together and develop a bit more integrated approach?

**Simon Hill:** I think just probably said I think you dropped ability to this, and I think it's going to take a partnership approach. You all got skin in the game, public health providers, private and being these legislators, I think it's really important because I think it is one of the key barriers for us at the moment. Until we can get to the point where we can start sharing information. More seamlessly. And then the opportunity it creates to build on top of that. All got interests, we've all got responsibilities and the overarching legislation framework as well. But I think it is critical for us to be able to unlock the true potential of displays absolutely.

**Emma Hoban:** Catherine did anything come through when you were writing the report or researching the report?

**Catherine de Fontenay:** Well, so as we mentioned, we do have these concerns about sort of some duplication of costs that seems to be happening in that electronic medical records space. So, Simon's absolutely right that interoperability is hugely valuable and that, for example, the states

that are developing an electronic medical record. Across their hospitals are getting, you know, have some large potential benefits from that but as a complete outsider, I guess I'd question whether it makes sense for all of the states to independently develop their own system that is bespoke to their state that that does seem like a bit of duplication, and so states that have not yet chosen a system and rolled out a system they have lots to learn from, say, New South Wales and Queensland, and potentially we can reduce some of the some of the duplication and costs that we're seeing.

**Emma Hoban:** Thanks, Catherine. And we've had a few questions come through about. The role of stakeholder and consumer engagement in the process of implementing technologies so would the speakers like to comment on the importance of stakeholder engagement, how to identify key stakeholders, and how is the best way to engage them in front of mine are the clinicians. The patients and the decision makers who are holding the purse strings. Catherine, did you want to start?

**Catherine de Fontenay:** Sure. We mainly heard about this in our consultations with regional and remote, so. We heard very often that say when a new technology was rolled out to Aboriginal community-controlled health organisations, the there was lots of funding for the technology, so the new retinal eye scan equipment would come in, there was less funding for training workers. To use that technology. So, Simon mentioned that that helping workers to, to have comfort with the technology is critical. There's turnover in those health organisations, so there wasn't ongoing funding for keeping, that keeping that capability with the technology. And then there wasn't necessarily a funding arrangement that allowed for a specialist in the city to be doing the analysis of that retinal eye scan. So, we do when we roll out these technologies, we do need to bring all of the we need a funding model and all of these stakeholders involved as we think about what a sensible rollout model could look like.

**Emma Hoban:** Simon is someone that's on the ground. What are your thoughts on this? How do we engage stakeholders?

**Simon Hill:** Stakeholder engagement and use it, to me, it's fundamental to in success and I think we just need to recognise that there are so many different stakeholders. We've got our commissions, we've got our consumers, we've got our vendors, we've got our technical people, we've got our doctors and I often say nurses, allied health. I would say within health, one of the things that I've learned is we've got so many different groups that all have their own language. They all have their own requirements. It's so important in terms of any system change that we are engaging and we didn't take the engagement to them. We need to take it to the front line. We need to take it to our patients. We need to get their feedback because it's so important in the overall scheme of things.

I think one of the things I will say is I'm really excited that with our digital patient record, 55% of the decisions that are going to be made into building the system will be driven from a user engagement process. And I think there's 70 or 80 different groups looking all these different parts. And to know it's 55% of the decisions that are going down a building the system are from the users on the

ground. It is really pleasing for us. So, I think that's the thing we need to have a user centred design getting input. So, many people and really use their feedback to drive decisions around the building. I think that's a really exciting number for us and expect a good outcome as a result.

#### Emma Hoban: Thanks, Simon. Kylie.

**Kylie Woolcock:** Yeah. Thanks. I agree with everything that's been said and I suppose what I took from one of the one of the statements in the report. That, it cautioned. That the ease with which these technologies can be rolled out risks a costly expansion of low value services and I think that's one of the, you know, critical reasons why we need to ensure that we do engage broadly with stakeholders and that includes our consumers and our communities, to understand what it is that, you know, there is this often, I guess, an innate desire to have what's newest and latest. But I actually understand what's that actually providing them in terms of the outcomes that they all receive and what the implications of that are will be critical to ensuring that we don't expand low value services and further risk, I guess, the sustainability of our health system.

#### Emma Hoban: Thanks Kylie.

**Simon Hill:** Sorry, I'm just one point, Kylie made a really good point there that the digital literacy of our community is quite high and their expectation for digital interaction with healthcare services is there too. And if you look at healthcare as an industry compared to finance or real estate, we're a long way behind that, so patient expects to interact with health services. And we, there's so much more opportunity there. So, I think that's going to be a real benefit for us. You know the clinician advantages, that the patient experience as well their expectation of digital, something that we think that single digital patient record number and is really going to help drive improvements.

**Emma Hoban:** Thanks Simon. I completely agree with that. I once heard that phrases, consumers are being trained by other industries and then for digital literacy and then they get to healthcare and it's just not there. So, I'm building on that and wondering if you had any thoughts about what, how we can kind of leverage these other industries that are so far ahead of healthcare and collaborate and learn from them? Catherine?

**Catherine de Fontenay:** That's a great question I look, I think some of it is just that observation and kind of the, just an observation of how it's being done in other in other industries. You know, why is it that if you go into a hospital, you give your personal details four or five times in a row before your surgery? What you know, to some extent, we'll get that feedback from consumers that it's not, it's not the same consumer experience as they're getting elsewhere. I guess that's what we're seeing in telehealth as people are looking for that convenience and ease of access that they're experiencing in other parts of the of the system. Now, if that's, if that's ease of access for services that are valuable for them to get, that's great. If that's ease of access for a service that's less valuable, we maybe we maybe don't necessarily want to encourage that.

Emma Hoban: Thanks Catherine. Simon, also Kylie, I can see you already to answer. So, Kylie?

**Kylie Woolcock:** Yeah, it reminds me of a story that we heard from some of our colleagues in the system around the way our sporting groups have that connection with people for life. You know that cradle to grave. They cricket, you know, they'll sign you up in the beginning of your life for a cricket, but they, you know, they're thinking about what team you're going to be playing for, for, you know. As well as then, who you going to be going for when you become an adult and they really engage you? And I think that's something that when we think about relational continuity of care, it is about the relationship with health and healthcare that we think about that for life. And I think that there's another opportunity for us to learn from those kinds of systems around how we, how we engage people in their health over time too.

Emma Hoban: Simon, did you have any thoughts?

**Simon Hill:** Yeah, absolutely. And Catherine and Kylie both talked about it. It's that partnership approach is what we need and often how do you find out you ask? And I think the big opportunity in health is how we're partnering with our universities. How we're partnering with our vendors and our private partners in in building these systems and asking the question: what works for you? And I think that's something certainly we're looking at within Northern Sydney, we've got a really great opportunity in something terms about physical infrastructure. We've been able to build simulation centres where we actually invite colleagues from other industries that come in and experience the day in the life of what it's like to be an emergency clinician and obviously, we should be using that opportunity for partnership around building your digital experience, what are your customers telling you? How can we work differently in health to build that that digital experience for healthcare.

**Catherine de Fontenay:** This this other research we did on productivity and healthcare found that the healthcare system is incredibly good at finding out what the latest treatment is overseas and folding that into best practice. So, we really are getting top notch care when that cancer treatment improves overseas. We're folding that into our practises here. We're using the medicines, we're using the treatment, but when it comes to digital technologies, we don't have that same mindset of we should be best in show, you know and. And so, it's kind of an interesting contrast.

**Emma Hoban:** Thanks, Catherine. We might just move on to the issue of cyber security and I know this is a very touching one for a lot of people, but cyber security is a significant challenging for healthcare organisations in the US, remediating breaches in healthcare has been estimated to cost almost three times that of other industry. Is with our healthcare system comprising of so many organisations of different sizes. Are we ready for the cyber security perspective to take advantage of the productivity gain? Catherine.

**Catherine de Fontenay:** That's a great question. Look, I think we need to ask some hard questions about what data needs to be shared and how much needs and sort of how often. Even so, again, one of the reasons we do think my health record continues to play a key role in sort of record sharing across the system is that a system can upload those basic things that are needed to be shared into my health record and then the cyber security risk rests with the Australian government. Within a within a hospital, if a hospital system wants to share with all other hospitals, there are some big investments in big risks that are that are involved. There are also big gains as

Simon was pointing out, hospitals at the level of their own electronic medical record can make decisions about how much is shared. Outside of hospital walls, so one hospital we spoke to specialists that are on call can view all of the patients records and make decisions, you know, sort of speak with great quality of information about what should be done by the people that are on site. That's terrific in terms of an information, but it obviously raises more cybersecurity risks. So, there are going to be some trade-offs.

#### Emma Hoban: Kylie.

**Kylie Woolcock:** Yeah. Thanks, Emma. I certainly don't have any comments around the solution for this, but I do think it's something we need to be critically aware of, is the cost of cyber security to services and if services are already questioning, you know, their own viability and financial sustainability. Those exactly what Catherine just referenced is those questions. About, you know, it's not just an open up all information for everything but thinking about how we ensure that health services have the funding that they need to do this properly, but that we're ensuring the right data is shared at the right time and the right to the right people for decision making, not just broad sweeping scale decisions for this very reason.

**Emma Hoban:** Thanks Kylie. We've got time for one or two more questions. So, another one from our audience – how much is the digital health blueprint and action plan 2023-33 influencing our or guiding the panels area of focus work? Simon, is this something that's guiding your work?

**Simon Hill:** Yeah, look, I think it's. I think it's there. I think it's something that we're considering in terms of all of our investment decisions. Is it being the forefront of all our decisions, no, but it certainly is something that we look factor in. It's important to have, important to have guidelines, it's important for us to understand what the vision is. You know where we are heading, We also are looking to build that capability, you know within NSW Health and informing how that would mean for us. So, look like I'd say it is a factor and its important tool to help us, for sure.

Emma Hoban: Catherine, did you have any thoughts?

**Emma Hoban:** No? Ok, no problem. That kind of brings us to our final question of the day. If we're to harness and make the most of technology in healthcare, what do you think are the critical next steps needed? For each of you, if you had one wish and could only ask for one thing, what would it be, Catherine?

Catherine de Fontenay: Ooo, as a what? What would be my wish for the next step?

Emma Hoban: Yeah.

**Catherine de Fontenay:** Uh. Probably a revision of funding rules looking at sort of remote monitoring and digital therapeutics.

Emma Hoban: Thanks Catherine. Simon.

**Simon Hill:** The number one thing, I think I made mentioned before, the feedback I get from clinicians is: Simon, we want tools that enables me to spend more time with the patient. So there's no, there's no easy answer to that. And I think we've talked a bit around some of the foundational things, some of the [muffled] things to help to drive that. But for me, if I had one thing, it would be how can I enable an environment that my clinicians, the human side of healthcare, no matter what digital technology ally means for us, it means the complement us that how can we? How can we support our communities?

### Emma Hoban: Kylie.

**Kylie Woolcock:** Thanks, Emma. Look, it's just a nice broad one commitment from every stakeholder within the health system to be cognizant of the outcomes they're looking to achieve. The costs of implementing those and the context in which they're being implemented.

**Emma Hoban:** Thank you very much. So, that brings us to the end of our webinar today, *Making the most of technology and healthcare*. Thank you so much to all of our panellists for joining us today. It was a great discussion and really interesting starting point, I think. At the AHHA in the Australian Centre for Value based Healthcare we host we're at regular webinars on topics related to value-based healthcare.

Our next webinar will take place on Wednesday the 19th of June at 10:00 AM. Where we will hear from the 2023 value-based Healthcare Innovation award winning project, the breast cancer bundle of care model. So, this model brings together stakeholders from across the health system, create innovative person set of value driven model of care. So, it should be a great conversion. Find out more about our events and activities. See the AHHA website and you can also subscribe to the receive our monthly newsletter or join the Australian Centre for Value based Healthcare LinkedIn page to be part of the conversation. Thank you again everyone for joining us today and we look forward to seeing you again at one of our upcoming. Webinars. Thank you.

Catherine de Fontenay: Thank you. Thanks so. Much to the AHHA, this is great.