**3 March session: Steve McCrone and Cindy Blackwell | Julie Yap | Sharlene Bingham**

[Steve McCrone] I want to add to Jane's welcome; on behalf of the commission, I'm Gillian Bohm, the Chief Advisor Quality and Safety at the Commission and welcome you all very warmly to the symposium. We, of course, would much have preferred to have had the symposium in person, which we have had in previous years, but circumstances, as you all know, will not allow that at this time. We also have a full registration, and we're really impressed and grateful for that, knowing how clinical care services are really under pressure during the ongoing waves with Omicron from the pandemic. So, our very warmest welcome.

I also have apologies from Dr Janice Wilson, the Chief Executive of the Commission. She's unable to be with us today but thanks you and wishes you all well for what is an exciting programme that we are going to have.

Our first speaker today is Steve McCrone. Steve is a much sought-after facilitator and speaker, and I can personally attest to that as we've used him to help in our education and training at the Commission. It's very good.

Steve has had much experience in bomb disposal in the New Zealand Army; and this gave him a good understanding of decision-making under the conditions of uncertainty. Recognising this and that traditional management theory is of limited use and fast changing in highly complex environments, aka aka health, Steve has dedicated his career to learning and applying the complexity theory principles and to his consulting practice. Steve has developed the IGLX, Adaptive Strategy Approach, and he is an accredited Cynefin trainer. I'm sure Steve will introduce himself and tell us a little bit more about him and about some of these strategies and workshops that he's been doing. A very warm welcome to you, Steve, we so look forward to your presentation. Over to you. Thank you.

Kia ora koutou katoa. Ko Stephen Macron tōku ingoa. Thank you, Gillian, Jane, for the opportunity to speak today. Yeah, it's a shame it can't be in person. I'm going to firstly say hi to my mother and my wife, both of whom are on this call, both of whom are medical professionals. So, hello.

I'm going to just have a brief, kind of, talk today. I'm going to draw some pictures on the whiteboard. So, if you can't see, maybe you could – if you pin me on your screen, then you'll be able to see when I start drawing, and you'll also be able to observe the broad range of facial expressions that I use while I'm talking.

OK, so, the talk today is The Unintended Consequences of Improvement, and I've been working in, not so much the health sector, but it's certainly in safety and quality improvement for quite a number of years, and I've been working with Dave Snowden, who's developed the Cynefin framework. And I know Dave has been in New Zealand on a number of occasions and spoken in respect to his work in what we're starting to call anthro-complexity – so complex systems as experienced by human beings, sufficiently different from the mathematical complexity that you might get if you look at, say, the Santa Fe Institute or biological complexity of the ants and termites if you get into that. So anthro-complexity is an emerging field of study and really speaks to this idea of how humans experience complex systems given that we have intelligence, intention and multiple sense of identity, so, that's really where I'm coming from on this.

The key, really, message to the health, safety and quality community is actually, from my perspective, like, right now, here in 2022, is the time to really push the reset button in terms of how we think about our interventions in the health system. Incremental improvement and getting better at what we already do are no longer, in my view, sufficient to accommodate the complexity and the rate of change that we're seeing in that system. So, I'm going to be quite provocative in my description of both where we're at and perhaps where we need to be, and I'm hoping that that's going to elicit some interesting questions and some interesting feedback.

I've always been of the view that agreeing with me is not a prerequisite for success, and that really comes from my time arranging large-scale demolitions where I used to say to my guys, if one of us makes a mistake, we're all going to suffer the consequences, so, we can't assume that any one of us is right: we have to think for ourselves; we have to ask questions; we have to challenge each other. And oftentimes you might see in the military rank in seniority sometimes interfere with that, so we have to let go of that in order to learn and in order to remain safe. And that's a sort of a theme that I'm going to bring through today.

So, can I just, maybe, get in the chat if you want to sort of either raise your hand or put up a note. For those of you that are familiar with complexity and Cynefin and the work that Dave Snowden's done. And I know there'll be a number of you, and some of you haven't. It's not a prerequisite for anything we're going to teach today, I’m just quite interested.

I've been working with Dave in a sort of international community of complexity specialists for about 15 years now. Last year, the 21st anniversary of Cynefin, we, as a community, wrote a book called *Cynefin: Weaving Sense-making into the Fabric of Our World*, and a lot of what we talk about in that book, there’s a number of aspects to complexity that arrange there.

So, Cynefin looks like this … and I'm not going to spend a lot of time on it. It's spelt C-Y-N-E-F-I-N (the benefit of Google, you can probably learn more about it in 5 minutes than I can teach you), and we talk about different types of systems. So, some of the systems that we have are ordered, and they are clear to complicated. We think those as steady linear systems or systems where we can have a known or knowable outcome. We have complex systems, and we have chaos – try and stay out of there, although it is available to us, particularly in the health sector.

And in the middle, we have confusion, which again is a legitimate place to be, and a good example of that is as New Zealand a couple of years ago entered into a COVID constrained world, then we were locked into confusion about how long is it going to be, what are we going to do, what's the right way forward? And it is a legitimate place to be from a systems perspective. So those are the types of systems – audit systems, complex systems, calc systems – we'll talk about today. And my first point is: health system is inherently complex. And I know a lot of you guys already know this; this is not me decoding the Enigma machine. You can feel it when you interact with a system, the inherent complexity. You don't always know what you're going to get; the system doesn't have the consistency and repeatability and the equilibrium that we might see in the audit systems. There are parts of it that are clear, parts of it that are ordered, but by and large, the way that we have multiple agents interacting to give rise to often surprising effects and results means that it's complex.

And we have this in the health system, this thing we call ‘nested complexity’. So, at a cellular level, I am a complex organism; at a physiological level, I am a complex arrangement of cells; at an interactive level, if I go and see my GP or I go and seek treatment for a condition, that will be a complex interaction – no two patients are the same; no two people will respond the same way to the same treatment. At a systemic level, there is nothing in my view or no organisation more complex than say a large public hospital; multiple agents interacting in a way that gives effect to the outcomes and the outputs that we want. And then at a systemic level, the health sector is a very, very complex system.

And a challenge for a lot people is they try and define what the health sector is. The McDonald's at the end of Point Chevalier, where I happen to be, is as much as part of a health system as my daughter's circus skills programme that she does, is my wife's role in Auckland DHB, is all part of the health system; they all can interact to give effect to, say, my personal health and wellbeing. So that's the first point: it's the health system is inherently complex.

And there's three things that are interesting about complex systems. I mean, there's a lot of stuff that goes on. You could study this stuff, and I do kind of geek out on it. It's firstly they are non-linear, which actually means that they can react in a surprising way. Small things can have big consequences, and sometimes big things can have no consequence at all. OK, so, this nonlinear system means that they don't respond well to linear methods that work in the ordered systems, such as, root-cause analysis. In a complex system, there's no one cause or oftentimes no one cause for the result, the output or the impact that we see. And we, as humans, love to sort of simplify things so we can tell one story that acts as a sense of agency across the system in terms of how we cause this thing to happen or how other people cause this thing to happen or agents in the system cause it to happen. Oftentimes that's not true. They don't respond to things like the five whys for instance. So, we can see that, sometimes, we can bring our techniques from complicated across to complex, and they kind of don't work; the system doesn't seem to work like that.

The second point is they are deeply entangled, which means that they're interconnected at a level that often we cannot detect. The system can't be pulled apart and the components understood in a way that gives you a view to how the whole system will operate. Yeah, I mean, a really, kind of – a silly example is, you could anaesthetise and dissect a patient; you will never find their sense of humour. OK, which brings me to the third point, this idea of emergency. A sense of humour is an emergent property of you as a person and the social conditions with which you're in. You might be the funniest person at the party, but if you tried the same thing at a funeral, it might not be so funny. So, we have this idea of context, we have contextually appropriate actions.

OK, so, we have this idea of emergence of system properties that are neither predicted or planned, the system just moves in that direction; and we can see that through things like culture. You might have two levels of a hospital or two parts of an organisation that are ostensibly do the same thing. I do a bit of work with retail banks, so, you say, there might be three or four retail banks that ostensibly do the same things in the same way, but they have the emergence of quite different cultures, quite different sort of look and feel. And the systems can sometimes be quite surprising in that sense.

And those three things together – non-linearity, deep entanglement and emergence – mean that almost anything you do in a complex system will have an unintended consequence – things that you can't see or detect based on the thing that you change. And if we know that that's true, then maybe we need to start thinking differently about our role in implementing change or enabling change to happen in the health system. If we start to add, which is a sort of a modern focus on fast, verifiable results, then often we can engender multiple small changes that have a localised positive effect but actually cause secondary effects that may not be so positive or useful in the system. And then someone else will go in and fix those problems, and then they will have an unintended consequence somewhere else in the system.

And we can see that what we think of as a quality improvement whack-a-mole: every time we solve a problem, another one seems to emerge somewhere else. OK, and we kind of see that. We start with the – the key is it forces this – this thinking forces us to start with a linear plan and then be confronted by the complexity of the system. So, it forces us to consider our hypothesis and then watch it crash into the actual reality of the situation. OK, and as we continue to do that, it gets exhausting, and it's expensive; and it takes a lot of energy and a lot of resources to maintain that system. So, we're starting to think about it in a different way.

OK, so, the next point I want to bring out is this idea of authenticity. If I can show you that the system is complex, and I can show you that some of the methods and ways of working that we use today are best suited to an audit system, then, by definition, we are taking an inauthentic view to how we operate in terms of health, safety and quality.

The example that I might use is if I have a sore back – I've been to the gym a fair bit, and I'm starting to get a backache. Now, I've some options about going to see perhaps a homoeopath or a chiropractor. I could go see an engineer, like a mechanical engineer, or a veterinary surgeon or a physio. And I would say to you some of those options are authentic responses or could provide an authentic response to my back pain, and some might not. And it starts to become obvious to us that that is the case. Well, it's obvious to me as a practitioner of anthro-complexity that some of the interventions we use in the complex health system are inauthentic. So, I want to bring out three rules of thumb that you might want to consider.

And the first one is if you are intervening in a complex system, then stop doing it if you don't understand complexity. It's like an engineer who's designing a bridge and doesn't understand physics. If you know that this is a problem of physical nature and you don't understand physics, either find someone that does or stop doing what you're doing until you can learn it.

In the last 20 years, there have been massive leaps forward in terms of our ability to understand and provide effect in complex systems. It takes a long time for the system to catch up or the practitioners in the system to catch up. There's a lot of inertia, where people resist having their world view challenged. There's a lot of inertia to saying actually the things I've been doing in the past, they might have worked in the past or they might have been the best tools in my toolbox in the past, but there are better tools now.

So, my first point there is just push pause, and go back and actually contextualise. If this is a complex issue, and I haven't got the tools I need to manage complexity, maybe I need to go and find those.

The second point is the only way to act or understand – sorry – a complex system is to act in it. Yeah? So, the only way to know if you and I are going to be friends is for us to go out and have a coffee and a chat and maybe interact a little bit. I can't write my resume and you write your resume and work out if we're going to be mates. It doesn't work like that. Human interactions are a complex relationship. So, if you are – I'm going to bring this point out again and again – is if you are making decisions that impact a complex system and you are not interacting with it, then you must devolve that decision to someone who is. Otherwise, you are taking an inauthentic – Regardless of your intent or how clever you are or how skilled you are or how many times you've done it before, it's a fundamentally flawed assumption that you understand enough about the system to guarantee or be confident of providing a positive result. The unintended consequences are likely to be more than you can manage.

And the third point is if you take action in a complex system and you know that unintended consequences are almost certain, then you are morally obliged to detect and respond to those because they could be the things that push us into chaos. And the world is full of some really horrible examples of health policies that have led to extremely poor outcomes because people have either outsourced or are blinded to the consequences of those. So, blanket policy changes without a detection mechanism, they might work, but they are inherently dangerous because you cannot see into those dark spaces where bad things might be occurring. So, in my view, particularly in the health system where the consequences are often more than we can handle, we're morally obliged to do that.

OK, so, what we've got, I guess, is a system where the tools that we use are effectively, let's say, developed for a sort of a 1980s manufacturing paradigm. So large Western democracies who are manufacturing tools like Toyota cars and Motorola phones give us lean Six Sigma, PDSA, et cetera, et cetera. Those are linear tools that manage the variability when you want the output in an ordered system to be consistent. So, my Toyota will look like your Toyota if we both drive Corollas. Back in the day when we had a Motorola phone – I'm not sure who does anymore – my phone was interchangeable with your phone.

So, the design for systems that are repeatable, design for systems where you want to manage variance. So, I would ask you the question: Are two patients the same? Are two medical teams the same? Are two GP offices the same? Are two surgical theatres – they might have the same equipment – but are the teams the same? Are the surgeons the same? Are the nursing staff the same? We have a system that is dynamic and non-repeatable, and oftentimes we're using tools that are designed for systems that are linear and repeatable, and this is this challenge of authenticity.

All right. So, what do you do? OK. The first thing that we do is we start with complexity. So, if we start with linear tools and then crash into complexity, that's going to be massively inefficient. So, start by saying I think the system’s complex, and let's maybe look for some parts that are ordered, and we can use our tools there. And so, we start to think about different tools and techniques that we might use, and these are tools and techniques that we call sense-making. How do you harness the naturally occurring narrative in your organisation to see themes about in it that we can use to prompt the system to move to a better place?

One of the rules here is start where the system is rather than describing utopia and then trying to force the system to move towards it. Manage the reality of today rather than the ideology of tomorrow is another way of saying that. And this is where might we really crash into, frankly, the Six Sigma view, where Six Sigma is a utopia, and we're trying to get there. It's fundamentally inauthentic.

We have tools, like, say, natural sense-making, weak signal detection, nil hypothesis and abductive research (so moving away from empiricism at this point), constraint mapping – what are the dark constraints that prevent organisations changing? And I'll give you an example – probably got enough time. I’ll give you a quick example in terms of sense-making. Every organisation on this call will have words to the effect of ‘people are our most important asset’; ‘people are our most important thing’; ‘He tangata, he tangata, he tangata’. We've got this idea—and I say, actually, that might be true or it might not be true. So, maybe we could go out and ask a question about people. This is sense-making, ie, making sense of the world so we can act in it, to use Dave Snowden’s phrase. And we say to them, ‘Describe a time in your recent working history where that principle was upheld, and describe a time in your recent working history where that principle was under threat’. We could all do that, right? Describe a situation where actually it didn't look like people were our most important asset; describe a situation where it was.

And then we put those narrative in front of the leaders and the managers and decision-makers and the people themselves, and we say, How do we act in a way where we get more stories like this, and how do we act in a way where we get less stories like that? And that is an authentic response to the complexity of what it's like to work here. And now, by being in touch with the narrative, people know how they take direct action in respect to what they're hearing and seeing in the workplace; we have disintermediated our situation, so the people in the complex space can now – are empowered to take action.

Which brings me to the second point, and that is distributed leadership. And I know, I hear the phrase, ‘single point accountability’. Single point accountability without the power to allocate resources is massively frustrating. It's like saying, ‘I will blame you, but I will not give you the tools you need to change your situation’. Now, add a human resources mindset, that is, what I would say ‘atomistic’, ie, we're treating the individual as a unit of decision-making; we know, in complexity, value was created by interactions not by individuals themselves.

So, by saying, you are locked into a rigid system, you do not have the tools to change it, but I'm going to blame my observation of that system on your mindset or your behaviour is massively disrespectful and disempowering to most people. So, distributed leadership is about giving people both the psychological safety to express themselves in the system and the ability to take effect to change that. OK? We are relaxing the constraints in order to allow the people who are interacting with the system to make decisions to move in a better direction. And that is very, very hard in a system where budgets are pushed up and accountability is pushed down.

And the third point is this idea of team science. We know that value was created *between* the agents in the system here not *by* the agents in the system here. It's very often that any outcome in a health sector is due to the actions of one individual doing one thing. It's a group of people working together. And what we want to do is move away from the sort of atomistic view and actually teach people how to operate as a team. We have this very individual focus in terms of things like leadership development and personal development, and I don't often see authentic methods in terms of teamwork. There's two angles here that I want to talk to you about. There's two areas of the world where we should or could learn from. The first is actually the military. The military are very, very good at the tools and techniques around teamwork. Because if they get them wrong, teams of people die. They have techniques we call ‘red teaming’, ‘team science’, et cetera. The second thing that we've got, here in New Zealand, is we have a culture. The Māori and Pasifika communities, they understand things like intergenerational wellbeing. They understand the power of whānau and iwi in order to get and support the vulnerable amongst us. OK. What I see in this world – and I'll be a bit blunt here. A lot of the people on this call are former NHS people. There's nothing inherently wrong with that, OK? But I know from having lived and worked in the UK that there is no cultural equivalent of the Māori and Pasifika communities in the UK. So, in order – rather than taking the view that we need to accommodate these communities within the linear, rigid, atomistic and deterministic system that we have, maybe we could relax our constraints and shift our system to a place where we know that we have people who are far more attuned to the idea of teamwork and whānau than we will ever be. People who don't look like me, frankly, and think like you, OK? And that's going to mean, again, a fundamental shift in the way that we think.

So, that's enough about my lecture. So, I'll ask you the question, should we follow Toyota? Should we continue with these methods that are invented by the large manufacturing agencies in North America? And actually, the answer to that just very quickly is yes. I was going to show you something. I'll share my screen for a minute. … This is Toyota. Can everybody see this? Just give me a thumbs up, OK? This is what Toyota are now calling their ‘flow system’. For years and years, Toyota, the paradigm with which they ran their vast global organisation, was based on the Toyota Production System or TPS, and that was about lean systems thinking this Six Sigma stuff, a lot of the Japanese management practices that you might have been – I certainly did – learn at university. They then had the continuous-improvement-respect-for-people mindset, but even Toyota have realised that the complexity of the modern automotive industry is now clashing into changing socioeconomic conditions, changing expectations. So, my colleagues in the US – these are people who are now my business partners – formed a consortium who have worked with Toyota to move them to what they call a flow system. And you'll see, at the top there, it's got customer-first value delivery. You could exchange it for patient-first value delivery. And the three cornerstones or strands of DNA they call it – that they use – turns out are complexity thinking. So, they talk about Cynefin; they talk about complex adaptive systems; they too lean very heavily on the work of Dave Snowden and his network; they talk about distributed leadership, psychological safety, active listening. And there's a number of other tools in there that you may not have heard of – Wardley maps for instance, collaboration bias towards action and the third one is, of course, team science. They come at this very much from the North American military bent, and you’ll see here we've got red teaming, human-centred design, which I know a few people on this call are pretty good at, situational awareness, shared mental models, et cetera, et cetera. So, I can put a link to that in the … sorry, I'll just stop sharing – I'll put a link to that in the chat. But that's really enough for me. I'd be quite interested in hearing from you guys in terms of your perspective if we've got any questions or anything you want to talk about.

There are a couple of questions in the chat, Steve. I'll read them out for everyone.

OK.

From Catherine: what about when it's important to reduce error in theatre? Would we use a linear system, then?

The answer then is, I don't know. My problem-solving methodology would be to say, which parts of this can we control? So, if we've got absolute control over the inputs, the process and the outputs, then you would use your linear methodology; it's an authentic response. If the system could generate, or is complex by its nature, multiple agents acting in ways that we can't fully understand, then maybe we need to start thinking about multiple safe-to-fail experiments. What can we change? How can we monitor the output or the outcome of that change? How do we amplify success? How do we learn from failure? And then we might want to try multiple experiments in parallel, and then we learn about the system by acting in it. If we've got an expert, someone we can ring and say, hey, what do we do here? And they say, actually, we had that problem two years ago, and we did that; we bought this machine; we changed this process; then we're back to complicated; we've got a expert that can help us. If we can't find an expert, we don't really know what's moving forward; it's unprecedented. Then we go, OK, what is safe-to-fail experimentation look like here? And then we amplify success; we learn from failure. It's a good question. So, there's no one answer. It's context first. What is the context of the system we're in? And then you apply an authentic methodology to that context.

Thanks Steve. So, Andy just wanted to capture the three rules of thumb that you spoke about, but and he also suggested that could be sent after as well if—

Yeah, I do have an annoying habit of just sort of scribbling stuff on my iPad and then blurting it out on screen. So, if you guys want a set of notes based on what I've just talked about, I'll send those through. I haven't – I mean, based on – and maybe we could answer some of those questions in those notes as well. So, I'll get those written up, made a little more professional, and then I'll send them through to you guys for distribution, assuming you guys want them. If you don't, I won't get—

No, that sounds great. Thank you, Steve, I'm sure it'll be appreciated. Yes, and there's heaps of yes pleases coming through.

[INTERPOSING VOICES]

OK.

So, Mary asked is collaboration teamwork with Māori and Pacific currently in practice? And I'm not sure if that's a question to Steve or to the audience. I'm not sure but—

I can't answer that. I guess you guys could.

Yeah, I think – yeah.

Can I make a point about that? I heard on the radio the other day a Pasifika organisation, and you guys might have heard of this philosophy, it's ‘any door is the right door’. You guys familiar with that? Yeah, and what that speaks to is, actually, we need a dynamic system that self-organises around the needs of the individual. So, I can come into the system anywhere I like, and then we will coalesce and help them through, and that's a distinct contrast to the more linear approach where we say, we're going to design a system and then expect you to learn how to navigate it. One is a systems-first approach, and this one is a customer-centric or individual-first approach. And I think, you know, learning from that and then maybe trying to apply that in more rigid health circumstances would be very, very useful. And the way to do it is to engage with the people who are facing that problem who are and learning and interacting with that system, which would be that Pasifika organisation. I don't know who it is actually. If you guys do, I'd love to make contact.

Got a question here from Fiona. Currently, there is a huge problem in health staff shortages. Brainstorming training and retraining has us going round in circles. Increased pay may lead to staff choosing to work part time. Funding study may be a way of training Australia's workforce at New Zealand's expense, et cetera. Good example of a complex problem, question mark.

It's a exceptionally good example. I just missed a call from the CEO of a construction company, and one of their biggest problems is there are massive staff shortages: the Australians are stealing our people. It's almost word for word. So, this is a systemic issue: it's not a health issue. And my advice to them is, firstly, it's not a problem to be solved. No one's going to say, actually, I'm a genius, I can come in and solve this for you. Rather what we think about is what parts of the system can we change? And one of the things that I was starting to see, or I kind of like the sound of, is how many roles and how much work or effort that we put in do we do where you don't need to have a whole lot of expertise or let's say training? And then how do we quickly bring people who are intelligent, curious and hard working from other domains in to fill some of these gaps? And that allows trained medical people to do medical stuff rather than maybe admin stuff. How do we augment some of our processes with technology to make them more fluid, faster, et cetera? How do we get good at rapidly bringing people through our training systems – now, that's all we can do. How do we get really good at bringing people who maybe don't share our language or cultural background into our system in a way that they can provide effect? You know, that's all we can do. We can manage the tension, but we're not going to solve the problem.

Right. Thank you very much, Steve. That's been just fascinating – really interesting, and I know everyone's enjoyed it. And there's some comments to that effect in the chat, but I will hand that to Gillian to continue with the rest of the session, but thank you very much.

Thank you.

Steve, it is up to me to say thanks on behalf of us all. Absolutely fascinating. Lots of parallels., I think you'll see from the chart, which we'll share with you, that people find that, given the situation we're in, there are lots of clues in here to do that. So, again, thanks, and we will move on to our next presentation.

So, we've got the next presentation of HOP Squad Cross-service Collaboration to Improve Complex Discharge Planning for At-risk Elderly Patients. The two people that are presenting today are Cindy Blackwell, who's an improvement advisor, and Juliet, clinical nurse specialist in gerontology from Counties Manukau hospital, and Charlene Bingham, the service manager. I actually think that Cindy will tell us that it's only Cindy and Julie here today, and Charlene hasn't been able to come to us. So over to you Cindy, and you can – you and Julie can do further introductions if you would like of yourselves. Thank you.

[Cindy Blackwell] So, I’ll just quickly start with a bit of introduction and background that Middlemore hospital is a 900-bed hospital serving a diverse and multi-ethnic community with many living in high socioeconomic deprivation. This project is within our general medicine department, and it focused on patients who were 65 years and over who had complex discharge planning needs. As a way of background, the HOP Squad Project fits within our much broader Every Hour Counts programme, which aims to improve acute patient flow right from the front door through to inpatient to discharge and out into the community. And the HOP Squad was a change idea that came about from a project that we were working on to standardise our NASC processes. And we realised that as it's a cross-services change idea, we needed to establish it as its own separate project.

During our earlier work, we mapped the discharge planning process with clinicians from our Gen Med wards, and this highlighted that discharge planning typically doesn't start until a patient is medically cleared for discharge. And that can be less of a problem and create less delays when everything's within the control of the ward to organise, but when it’s complex activities tend to happen in a number of sequential steps, which can then lead to delays. This is especially the case for our most frail and elderly patients, who have come from home and are now thought to require either rest-home or private-hospital level of care. So, when there's a question about discharge destination, is it home with increased supports or placement into an aged residential care facility? There are a number of assessments that are needed. And our data showed that these assessments took five days, and these delays to discharge put our patients at risk of deconditioning and hospital-acquired infections. So, we're keen to support best-practice discharge planning, which actually starts when a patient is admitted to the hospital.

So, our aim statement for our project is to reduce the time taken from first discharge referral to final assessment – though Gen Med patients referred to the HOP squad, which is Health of Old People Squad, from a median of five days to four days by the 30th of November '21. As the HOP squad developed, we collected data on other important processes and outcomes, too. I'm going to share those at the end of our presentation. But what we realise is that complex discharge planning is complex because there are multiple services who are involved. And when their service is outside of the ward, referrals are required, which in turn need to be triaged and allocated.

So, our project sought to improve the timeliness and the coordination of these activities to increase information sharing both between the clinicians and the patients and whānau and also, between all those different clinicians who are involved in the discharge assessment and planning process. And our ward clinicians said, actually, they weren't too confident with complex discharge planning and wanted to increase their knowledge and confidence, including the appropriate pathways into the community. So, in a nutshell, the HOP squad is designed to ensure that our frail and elderly patients on the Gen Med wards experienced the same level of discharge planning as those on our specialist HOP wards for the acute care for the elderly.

HOP Squad is made of our clinician who are expert in elderly and pro-patient care. Their aim is bringing together clinicians from HOP Squad and the ward team to work together in partnership to discuss discharge planning for the patient to go home safely. This give opportunity to the work team to stop their business, to sit down, to focus on elderly patients with complex issues and to exchange ideas with other clinicians. The purpose is to support and enable the ward team to explore options to discharge patient home safely, with wrap around community services. For example, with elderly, the acute setting is not the best place to address frailty. Some patients are discharged with follow-up by the community geriatric service for comprehensive geriatric assessment. Indirectly, HOP Squad is an empowering ward team in upscaling discharge planning for other patients.

As we progress, some clinicians from various services were interested in joining, so we tested their participation. Some stayed and others left. We find community health services, hospital in the home and complex nurse management are useful for continuation of care in the community for chronic management. This potentially prevents avoidable hospital admission.

So, we used the model for improvement methodology for our project, and we drew on important patient experience that was gathered during our understand and diagnose phase, where we interviewed a large number of patients about their experience of discharge planning in general and also a smaller group of patients and their whānau, who had chosen to move into aged residential care for the first time. We ran lots of PDSA cycles on all – to develop all aspects of the HOP Squad process, including the criteria for referral to the HOP Squad; the HOP Squad membership; the huddle logistics; the roles, responsibilities; how we met, in person or Zoom; the meeting frequency; the processes as to how patients were identified and what information needed to be brought to the huddle. We started on one ward where we ran all of these tests of change and have taken a staged approach to spread.

Why the project is successful. Clinicians are committed to working through the testing process. We appreciated the spirit of experimentation. We continue to develop new ideas to test and retest, until we could see the impact of our efforts. We have committed project leadership and sponsorship, which has built buy-in. We gathered and analysed data to show the impact of changes. As traction was gained, other services saw the value and joined our HOP Squad.

With successes, there are also challenges. For example, the first ward was open to HOP Squad's concept. Clinicians from both teams were new to the project and committed to work through – and are committed to work through the PDSA cycles. The second ward is known to be good with discharge planning due to a very experienced and proactive social worker, such as they couldn't see any added value. The first meeting was via Zoom. The audio was poor quality. This factor made it hard to build a rapport and lead to poor engagement. It was difficult to build a workable partnership, even when we had the opportunity to meet face to face.

The third ward was the ward we had been working with to collect comparative data, and they were excited to join the HOP Squad. In addition, the Allied team members were previously working geriatric wards. They understand the complexity of discharging elderly patient home safely. They foresee patient's functional baseline and social background affecting a patient's discharge designation.

This enables early conversation with patients and their whānau on options. Where is home from hospital? Overall, most clinicians embraced the opportunity and the knowledge they gained. A few couldn't see the value. Then COVID came. No face-to-face meeting. Zoom is not the best way to go to build workable partnership, although it worked well once we had a good rapport. HOP Squad stopped during lockdown, and we started in January. Two of our ward now are allocated as COVID wards. HOP Squad stopped again. Data collection can be challenging. There were no pre-HOP Squad data available in the system for pre- and post-comparison. It was time consuming to get the comparative data from another ward from scratch.

So, throughout the project, we collected a lot of data, including identifying and tracking discharge activities for comparative patients on one of our other Gen Med wards. When we look at the data relating to our own statement, it showed that the HOP Squad ward was able to achieve our aim to reduce the time taken from first referral to final assessment from five to four days; and this is compared to five and six days on the other Gen Med wards.

Length of stay is often used as an indicator of patient flow, and while it's a blunt tool, we monitored length of stay for HOP Squad and comparative patients. The mean length of stay for HOP Squad patients was 11.4 days compared to 15.5 days for the comparative patients. HOP Squad patients were also more likely to be referred to a community service. And when we looked at the type of referrals that were made, we saw that HOP Squad patients were referred to a much broader range of services. This indicated that having the community input with – knowing what services were out there had helped the ward clinicians to link into those for the patients.

Feedback from our ward clinicians told us that their knowledge and confidence did indeed increase after participating in the huddles over time. And, on average, they went from feeling moderately confident to feeling highly confident in complex discharge planning, which is what we really wanted – We want to be able to make the HOP Squad redundant as much as possible. Community clinicians told us that they appreciated hearing about the patient stay, and being involved in the discharge planning enables a smoother transition into the community.

So, our next steps were, with COVID, we will continue to face challenges and changes every day. The good thing is that the ward clinicians continue to see the value of the contribution of the HOP Squad. And even when the ward workload necessitates that we have to (or COVID) put a halt to huddles, they still continue to call the HOP Squad members as appropriate when they're feeling stuck or need advice. In time, we hope to continue the spread of the HOP Squad to additional wards and further increase the knowledge and confidence of ward clinicians over our Gen Med wards.

And I just wondered would it be helpful just to finish with a real quick patient story as to the impact of the HOP Squad. So, we had a patient who had four admissions in the previous 12 months, including a two-month stay in the stroke rehab ward. And they came in to our HOP Squad ward with exacerbated COPD, and – but the patient really wanted – her goal was to go home. Placement had been discussed previously, but she and her family really wanted to be able to be discharged home. So, she was with additional supports, including a visit from our community jury service, where they did a great assessment with the patient in the home, and was able to identify further needs to support her to stay safely at home. And she didn't have a readmission within the time frame that we measured. She did have one a little bit later, but her condition hadn't – wasn't so acute that she needed to be admitted into an acute bed. Instead, she was able to be admitted into hospital in the home, which would have been a much better experience than another stay in hospital. So that's the sort of thing of what our HOP Squad is trying to achieve.

Fantastic. Thank you very much Cindy and Julie for that great presentation. There has been one comment and one question in the chat so far. We've just got a couple of minutes. The comment from Sally, ‘It will be interesting to learn if the current InteRAI acute care pilots show discharge planning improvements. Thank you for your presentation.’ And from Jackie Harris, ‘What are the actions you have implemented to ensure that the work done is continued?’

A good question. It's sort of has – on our HOP Squad wards, it's become quite business as usual, but we still have work to do in terms of going to the other wards and spreading it.

Yes. That sort of came across in your presentation as well. And you commented on your presentation that other services saw some of the benefits that you gained and joined, which is an example really of that emergent spread. I just wonder if you would like to share some insights around that – how you saw that occurring, anything that you did that prompted that.

Yeah. So, we had great interest. Some of the ones that – the real successful was around the complex case management and hospital in the home. When they heard about it, they were keen to be involved, and that was really valuable. They added a great contribution and continued to participate in it. We also had people – because the HOP Squad was gaining a reputation for really connecting with the ward clinicians and some – there were shared models of care was something they were quite keen to see whether that could be something that could be sort of leveraged into the HOP Squad. And we tested that for a short time, but it didn't – and Amber Care as well. But while those are really valuable models, the HOP squad itself and the HOP squad huddles wasn't necessarily the best place to be because there a 30-minute short sharp huddle talking about quite a number of patients at a time that it wasn't quite the right forum for those models.

Thank you very much. That’s fantastic. I'll hand it to Gillian to continue. Great job keeping to time I have to say.

[LAUGHTER]

Thank you – thank you Jane for being our Yoda today and keeping an eye on the chat and doing that. I just really want to say thank you to, first of all, all the speakers. That's been really, really interesting content. I'm sure we've stimulated people to think, particularly, Steve's work around Cynefin, and well, as Steve said, ‘put it into your Google’, and Google will bring you heaps and heaps of interesting articles and further information about that. Great.

I just want to remind you that we've got two more of these sessions on the 10th and the 24th of March – same time, same place. So, and thank you all for attendance. We wouldn't be able to do this without you. So, thank you, and over to Jane to closing and karakia. Thank you, Jane.

Thank you, Gillian.

He karakia whaka mutunga.

Kua mutu a tātou mahi

Ka tae te wā

mō te whakairi te kete

I te kete kōrero,

I te kete whakaaro

Hei tiki atu anō mā tatou

Tauwhirotia mai mātou katoa

Ō mātou hoa

Ō mātou whānau

Āio ki te Aorangi.

Hui e tāiki e.

Kia ora everyone. Thank you.

[MUSIC PLAYING]