



The Future of Virtual Health Care in New Zealand

NZHIT Virtual Health Industry Group Position Paper

November 2020

ISBN 978-0-473-54784-4

Publisher: New Zealand Health IT

This paper has been prepared by members of the NZHIT Virtual Health Industry Group (VHIG), representatives from organisations that are optimistic about the opportunities that virtual health care technology, new models of care and a workforce that is digital-ready can bring.

In this document we look at the barriers to wider adoption of virtual health care in New Zealand and make recommendations as to how we may overcome these.

Contents

Introduction..... 1

How do we see virtual health care in New Zealand by 2025? 2

Background..... 2

Why Virtual Health is Important 4

Call to Action 6

Risks for Investment in Virtual Health..... 8

Recommendations to decrease risk 8

Foundations for Virtual Health..... 9

Opportunities for Virtual Health Innovation 10

What role can you play? 11

References 12

Acknowledgements 12

Introduction

It's time. Time for virtual health care and telehealth interventions to move from pilot projects on the fringe of health care to become mainstream.

Virtual health care solutions have been around for decades. Virtual health care encompasses terms like telehealth, telemonitoring, telemedicine, smart sensors, remote patient monitoring, teletherapy, remote diagnostics and virtual consultations.

Put simply, virtual health care allows health and care services to be delivered in situations where the care provider (or team) is not in the same physical location as the receiver of that care. By definition, care delivered in a virtual manner relies upon technology to provide full enablement of the models of care involved. In some cases, these models must change and in nearly all cases the business models have to be adjusted to maximise the delivery of care in this way.

The technology to support these 'models of care' has been commercially available since the eighties, and nowadays most people readily carry or can access a mobile phone, that can fulfil the function of a telehealth device, around with them.

“Research shows that the future of health will likely include (and, in some cases, is already starting to include) a growth in virtual healthcare to better enable clinical care, particularly for people in remote or rural locations and people with limited mobility or a lack of transport”¹

¹ NZ Health and Disability System Review Interim Report 2019

How do we see virtual health care in New Zealand by 2025?

Our vision is for virtual health care to be an integral part of the health landscape well before 2025, providing health and wellness benefits (as well as economic benefits) by providing care where needed and as directed by the patient, reducing or eliminating costs, delays and logistical nightmares associated with travelling to receive healthcare.

Consumer adoption rates make virtual health care ubiquitous – a tool that is available to consumers, their whanau, their health and wellbeing teams whenever and wherever required to support healthy living.

Background

The NZHIT Virtual Health Industry Group (VHIG) was formed in 2018. It comprises senior representatives from across the health and information technology communities, from a mix of primary health providers, community and non-government organisations and industry partners in the delivery of smart technology and tools to the New Zealand health and wellbeing sector.

When VHIG was formed there was a clear gap:

- in defining virtual health in New Zealand
- in the ability for Ministry of Health and providers to keep up with emerging technologies
- and the ability to provide solutions that would scale across the country.

The role of the Virtual Health Industry Group is to;

- work with other sector groups (government and non-government) to share a common narrative of technology in the healthcare sector and advance collaborative approaches to providing solutions into this sector
- provide leadership and advice on specific initiatives and issues that arise from time-to-time

- encourage and promote the understanding and uptake of advanced technological solutions that align with, and enables, the strategic direction of the NZ health sector and virtual health care market
- create and implement an operating framework to support projects in the NZ health sector
- promote and participate in a proactive co-design approach to system and solutions development.

Since its establishment, VHIG has observed progress in a number of areas across the sector, including a refreshed Ministry of Health digital health framework and investment approach, more collaboration between industry partners, government agencies and health providers, and a growing appetite for adopting digital tools and virtual health care solutions.

We support the recently announced national health information platform (nHIP) strategy with its more agile approach to funding, and are hopeful that the roadmap for the first phases and tranches of this new way of working will proceed swiftly, with the expectation that the work will help to progress:

- foundation services² (including provider directory and consumer services) that are readily accessible for integration with a range of virtual health solutions
- initial datasets, with strong governance and social license established for their use
- health consumer and health provider identity, and
- a meaningful health technology incubator to supercharge rollout of virtual health from pilot stage to scaled-up implementations that benefit all New Zealanders.

² Foundation services include National Health Index (NHI), Health Provider Index (HPI), National Enrolment Service (NES), NZ ePrescription Service (NZePS), National Immunisation Register (NIR) and National Screening Service

Why Virtual Health is Important

New Zealand government priorities focus on themes of equity, wellbeing, cross-government, mental health, data and person-centred.

It is our commonly-held belief that virtual health solutions touch on every one of these themes.

“Delivering health care at a distance is a practical and moral imperative in a world where underserved populations are the rule rather than the exception” (Rada, 2015)

We believe that virtual health care provides at least part of the answer to many of the tough questions raised in the New Zealand health and care sectors, including growing health inequity, an ageing care workforce, and geographic distribution of the health workforce, rising costs for care, and new demands placed on health providers due to changes in demographics and consumer expectations.

The delivery of health through virtual means allows barriers such as difficulty accessing care (for example, for rural populations or lower socio-economic communities) to be overcome by connecting providers with consumers using technology.

The current situation is increasingly being described as a “headcount paradigm” that has largely beset New Zealand’s health and disability sector for at least the past 20 years. This refers to the problem definition repeatedly being seen as “more people needing more care” with the consequent solution being that there needs to be “more people to provide more care”.

Clearly, the problem is very real, but the solution has proven to be inadequate as there is a finite resource of people who are able to provide care with the increased demands being placed on them creating immense workforce pressures, stress on the health and disability system and ever increasing cost factors that are mostly focussed on increasing the health workforce headcount.

More importantly, it is not meeting the healthcare needs of New Zealanders now and will not into the future.

There is also a lack of leadership and a lot of fear within the health sector, making the introduction of new ideas and concepts difficult as these barriers are as significant as trying to find enough people.

This combination is dangerous as you ask any DHB CE they will tell you that 75% of their emergency department is made up of older people. In the next 15 years we double the number of older people, at an average rate of 40,000 net extra people aged over 65 every year.

The solution must be redefined with technology being fully enabled to align with workforce, models of care, business models and funding mechanisms to create a proactive (a wellness vs sickness model) health, disability and social care environment.

The use of technology to support the provision of virtual health care does not mean that health workers will lose their jobs (i.e. the robots take over) as there are not enough of them to start with, and never will be. Virtual care means a shift to a greater degree of person-centredness, both in terms of patients being provided a more targeted and responsive level of care delivered how and where they choose, and that the pressures on the health workforce can be addressed.

The consequences of continuing to focus on “more people to provide more care” are too serious to be contemplated. Expecting the current health workforce to do more with less is a failed model and can be viewed as a major factor in New Zealand’s present-day health issues. Our citizens deserve better and we firmly believe that ramping up the adoption of virtual health care across the board will play an important role in completely redefining the “headcount paradigm”.

Call to Action

Leadership and policy

Patients not only expect virtual care they want virtual care. The NZ Health sector has been too conservative, and it will require leadership from the top to drive the uptake of virtual care.

In primary care and allied health, it will require a review of funding structures to enable the fast uptake of virtual care. Legacy contracting models are not fit for future virtual health care delivery. Funding is set up around 'old ways' of working, especially around contracting for activity inputs.

Virtual care is an enabler for a more efficient health system. A virtual care consult will cost the patient less time, and possibly less time off work, and less transport costs. For the clinician with correct processes, a percentage of their daily workload could be through a virtual consult. In trials done overseas, in many cases the clinician can take less time for a virtual consult than an in person consult.

Virtual Health allows the ability to shift the workload in new ways. Discover new Models of Care that consider the potential of virtual health to enable delivery in a different way.

Leadership must be at a national and cross sector level. Too much time has already been spent on trials, many of which are very successful, but never got expanded across the country.

Set up a Virtual Health initiative/commission to fund and drive a revolution across NZ Health to drive virtual care. This will be an investment in innovation with proven returns for the patient and the care provider. Partner with industry to create innovative solutions that can be rolled out across the country, then exported so as to create a local specialist industry. Create shared knowledge that advances digital health adoption.

Review best practice overseas and develop a plan for NZ based on proven and successful projects.

Focus on building a culture within the health and disability sector that will embrace new ways of working in a virtual context.

Virtual Health allows the ability to shift the workload in new ways, but funding types and funding practices remain rigid, especially ongoing support for innovative virtual care practices, rather than occasional one-off set up costs.

Models of Care don't yet consider the potential of virtual health to enable delivery in a different way that could improve access and equity of healthcare.

Security, Patient Privacy and Consent

The delivery of virtual health requires consumer and provider trust and ongoing consent to be front of mind managing experiences and expectations. Involvement of transparent data governance frameworks, including cloud risk assessment audits and defining the role of data custodians and data stewards as users in Privacy Impact Assessments is key to supporting adoption of virtual health solutions.

The cybersecurity environment is complex and rapidly changing. Therefore, it is expected that cybersecurity threats are managed and routinely reverified against the latest best practice standards.

Risks for Investment in Virtual Health

- The use of virtual health care in this country is still (relatively) new, and lacks comprehensive supporting literature (specific to New Zealand)
- The pace of change in technology and the emergence of new solutions outstrips the pace of solid peer-reviewed research

Recent literature suggests “while the technology can provide benefits, it is the context in which the technology is implemented and skill with which the implementation is conducted that realises the benefits” (Freed et al. 2018).

Recommendations to decrease risk

- Engage with researchers and academic institutions
- Develop active research to deliver early evidence that can help make the case for virtual health whilst more comprehensive studies are ongoing
- Adapt overseas results to the NZ market where appropriate and with urgency
- Differentiate between a new intervention (requiring clinical evidence) vs what may be simply an alternate delivery mechanism for a well-established analogue intervention (requiring implementation and adherence evidence)
- In multiple areas of digital health, the opportunity is in generating the big data that will enable continuous improvement in care
- Co-design and develop services, models of care and technology that engages and encourages experiences of telehealth by consumers, family, patients, whanau, and communities
- Align through HRC priorities and NEAC standards

Foundations for Virtual Health

Interoperability

Interoperability is defined as “the ability of different information technology systems and software applications to communicate, exchange data, and use the information that has been exchanged.” (HIMSS, 2013)³

The components of virtual health solutions need to:

- be standards-driven
- allow semantic interoperability, where the computer systems can exchange data in a way that the meaning of the data is unambiguous and is able to be understood by both systems⁴

Interconnectivity

- Historically, the only available directory service is a lookup system for room-based end-points within large health provider organisations. This limits the ability to include members of distributed care teams from primary care, allied health, community organisations – as well as consumers and their whanau – to actively participate in health and social care delivered via “virtual” channels.
- The system needs to promote and enable a more complete and more comprehensive directory service and allow contact records to be consumed from multiple systems.

³ For more information, refer to the NZHIT “NZ Vision for Interoperability (VIP)” paper available at <https://www.nzhit.nz/resources#INT>

⁴ “Semantic interoperability is about the clear understanding of stored, used and communicated data and information by the users of this information, in particular patients and health care professionals.” (HL7.org/detailed_clinical_models)

A digital-ready workforce

- Focus on workforce development to allow our healthcare professionals and caregivers to more readily adopt virtual health solutions
- Invest in the development of health informatics specialists with a blend of clinical and technology knowledge to enable more effective virtual health and digital initiatives

Opportunities for Virtual Health Innovation

- GP Consults that reduce the number of times a patient has to visit a GP
- Virtual clinical triage opportunities
- Retirement villages
- Follow up on surgery – often a quick 5-minute routine follow-up that means a person takes half a day off work
- Allied care – follow up of patient in home if there are any issues
- Chronic diseases require many visits to the GP
- Access to rural care – centres without GP access reducing travel costs
- Access to population that does not interact with the healthcare sector when they should – access via smart phone
- People with disabilities and empowerment to access healthcare without leaving their residence
- Patients retaining their GP when moving districts (Short or long term).
Consistency of care
- Single GP hub supporting access to care across multiple sites
- Reducing the digital divide and inequity around addressing digital literacy, cultural disengagement, and technology access barriers

What role can you play?

If you are interested in playing a role in advancing virtual health care in New Zealand, please get involved in your own place of work, and by joining one of the groups that plays an active role in advancing digital health.



For more information about telehealth in New Zealand, visit the NZ Telehealth Resource Centre.

References

Rada, G. (2015). Telemedicine: are we advancing the science? In D. Tovey (Ed.), *Cochrane Database of Systematic Reviews*. Chichester, UK: John Wiley & Sons, Ltd. <https://doi.org/10.1002/14651858.ED000105>

Freed, J., Lowe, C., Flodgren, G., Binks, R., Doughty, K., & Kolsi, J. (2018). Telemedicine: is it really worth it? A perspective from evidence and experience. *BMJ Health & Care Informatics*, 25(1), 14 LP-18. <https://doi.org/10.14236/jhi.v25i1.957>

[New Zealand Health and Disability System Review \(2019\)](https://systemreview.health.govt.nz/)
<https://systemreview.health.govt.nz/>

Acknowledgements

Executive members of the New Zealand Telehealth Leadership Group (NZTLG) helped review this position paper. Virtual Health Industry Group is currently a member of the NZTLG as the industry representative.