

Rapid Review of Virtual Care: A Consumer Explainer

REIMAGINING HEALTHCARE IN AUSTRALIA The journey from telehealth to 21st century design

Deloitte.

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 digital health
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REIMAGINING HEALTH CARE IN AUSTRALIA: THE JOURNEY FROM TELEHEALTH TO 21 CENTURY DESIGN – RAPID REVIEW OF VIRTUAL HEALTH

A Consumer Explainer

KEY MESSAGES OF THE RAPID REVIEW

- Virtual care is the next revolution in health care where consumers will play an active role in managing their care
- We can imagine three stages of development in virtual care
- Information sharing between health care providers is happening now: attention needs to be on improving how information is shared in the consumers' interest
- Trusted provider and consumer relationships are essential for progressing virtual health innovations
- Evidence for the benefits of virtual care is stronger for chronic disease prevention and management than acute care
- Realising the potential and benefits of digital health technology depends on user and consumer acceptance
- Regulation encompassing data sharing and data security to address consumer concerns about privacy and data control is a key element in achieving consumer acceptance and adoption
- The use of digital technologies mirrors existing social inequities: vulnerable people already experiencing difficulties in accessing health services can be further marginalised
- Involving consumers in virtual health co-design who are at particular risk of digital exclusion will help promote equitable access
- Equitable virtual health requires addressing overlapping issues of access to technology with literacy, and digital literacy requirements
- Successful implementation of virtual health solutions depends on a well-developed understanding of consumer needs and preferences involving consultation with a wide variety of consumers
- Poor uptake can be related to a misalignment with user requirements such as access, ease of navigation, complexity and privacy concerns
- Readiness to adopt and engage with virtual health is vital to realising the benefits.
- Experts and some health systems have identified the need for 'digital health navigator' roles to support consumers and the workforce to use digital technology
- Health system organisation affects implementation. There is little or no coordination of digital health implementation across States' and Territories' care delivery systems
- Consistent with policy shifts to person-centred approaches, virtual health models can empower consumers, particularly in self-care activities.

BACKGROUND TO THE RAPID REVIEW

CHF has been working with the Digital Health Co-operative Research Centre, Deloitte, and Curtin University to undertake an overview of the international and Australian literature and research to identify virtual health models that might improve or change how health care can be delivered and to outline the issues that impact on successful implementation. Virtual health refers to a diverse range of technologies that consumers, service providers and organisations may use to support care provided across a continuum from prevention, acute to maintenance care.

The intention of the Rapid Review was to provide an overview of the literature and key themes and involved a critical appraisal of 81 peer reviewed articles and 51 grey literature reports from Australia and internationally.

The Rapid Review found promising evidence of a range of virtual health models that augment existing approaches and indications of a future that will be transformed by new models of virtual health. However, the evidence base is growing and at times contradictory reflecting the challenges of evaluating and comparing virtual health models, the lack of evidence of at scale implementation and the context specific nature of successful implementation.

The following provides a summary of some of the key outcomes in the Rapid Review. The full research paper can be found on the CHF website.

CURRENT AND FUTURE STAGES OF HEALTH MODELS OF VIRTUAL CARE

Virtual care is the next revolution in healthcare, where consumers play an active role in managing their care by generating their data in a fully digital health system. Today many of us already do this through tools such as wearables (Apple Watch, Fitbit etc) or perhaps integrating our weighing scales to applications on our smart phones. Other consumers might use remote monitoring devices to help record and manage their chronic disease. But very seldom do all these tools “talk” to each integrate with systems used by medical professionals.

The Rapid Review broke the consideration of virtual health models into what can be simply described as 3 stages.

1) The first stage is basically looking at current practices in information sharing between health care providers and consumers, such as referrals, pathology results and decision making on care needs. The concept is to not necessarily change current practices of information sharing but to improve how information is shared. The objective being to in turn improve the accuracy of information shared between both providers and providers and consumers. The concept is that building on and improving current practices creates the building blocks for the introduction of further, and more complex, technology down the track. It also highlights that this will contribute to well developed and trusted provider and consumer relationships which is seen as essential for progressing virtual health innovations to the next stage.

2) The second stage involves more complicated technology that moves beyond current practices into new ways of delivering care and sharing health data. It might include remote monitoring of signs of symptoms and management or intervention and could extend to the use of mobile devices, to robots to smart homes and is linked to preventative health management and acute to

maintenance care. In this context the Review found that evidence for the benefits of models of care related to Stage 2 are stronger in terms of chronic disease prevention and management, with developing evidence in acute care. While there are gaps in available evidence at present technologies that are related to Stage 2, that is the introduction of new practices in health care delivery, are emerging rapidly.

3) The third stage looks at new and maturing technologies that will allow new models of care that are yet to be defined. This stage is characterised by a range of care provider and non-care provider data stored in “the cloud” and analysed by Artificial Intelligence with the objective of seamlessly providing a comprehensive range of services and information across the continuum of care including preventive, personalised and even predictive care.

Changes to how health care is delivered in Australia are going to accelerate at an unprecedented pace driven by digitalisation, consumer expectation and the advent of genomics and precision, personalised medicine. **The realisation of the potential benefits of digital health technology is ultimately determined by user and consumer acceptance.** While technical innovation represents enormous investment by governments, problems that arise with implementation of new digital health technologies often have little to do with the technology but overwhelmingly relate to user and consumer acceptance and adoption.

IMPLEMENTATION FACTORS

Implementation factors that can be both enablers and barriers are readily identifiable. However, barriers to virtual health appear to persist over time resulting in slow rates of adoption. This reflects the complexity of achieving successful technological implementation.

Equity

Although digital technology innovation has increasingly incorporated consumer input at different levels, the reality is that the diversity of consumers, particularly in terms of their locations, their backgrounds, experiences in the health system, and the various factors that determine their access to new digital technology, vary greatly.

Virtual health has the potential to increase access to services and reduce existing disparities. However, the Rapid Review research indicates that the uptake of digital technologies currently mirrors existing social inequalities meaning that vulnerable populations already experiencing difficulties in accessing health services can be further marginalised. The key challenge is not finding the technological fix but navigating diverse stakeholder interests and structural barriers.

Access to digital technologies is increasingly seen as an important determination of health and wellbeing. The 2020 Australian Digital Inclusion Index showed a slowing of the rate of increase in digital inclusion with a clear gap for those with lower levels of education, employment, and incomes, those in rural and remote areas, adults over 65 and Aboriginal and Torres Strait Islander people

Equitable virtual health requires addressing overlapping issues of access to technology with literacy, health literacy and digital literacy requirements. The Review highlights the need to

move away from technologically led development that tends to only bring consumers at the end of the process. Instead, there needs to be a move towards consumer driven collaborative approaches that, from the beginning, considers consumer needs and preferences.

The clear message arising from this Review is that understanding consumer experiences in a wide variety of contexts is key to broad acceptance. It is important to note that these issues are not new and in fact mirror what CHF has consistently heard from consumers over the years. If the objective of digital health technology is improved access to health care and in turn improved health outcomes, comprehensive consultation with a wide variety of consumers is essential.

Consumer Acceptance

While virtual health solutions abound, there is evidence that consumer dissemination and acceptance rates are sometimes low. However, Review notes that numerous studies and reports identify that **successful implementation is dependent upon a well-developed understanding of consumer needs and preferences**. The research shows that poor uptake can be related to misalignment of initiatives with user requirements, such as access, ease of navigation, complexity, appropriateness, capacity and privacy and confidentiality concerns. Virtual health development needs to accommodate the preferences of consumers, the variability in the conditions they manage and the settings in which they live. Understanding consumer needs and preferences comes from close collaboration with and leadership by consumers. CHF in its 2020 Consumer Commission Report outlined the need for partnerships between consumers, researchers, policy consultants and technology start-ups in co-design process to highlight the lived experience. This requires involving consumers in virtual health co-design who are at particular risk of digital exclusion to promote equitable access.

Workforce Readiness and Change Management

Readiness to adopt and engage with virtual health is vital to realising the benefits of virtual health.

Skill shortages are a significant risk for digital transformation. A workforce skilled and supported in the use of digital technologies represents a key enabler of virtual health. Digital literacy needs to be embedded in initial training for health professionals as well as cultivating lifelong learning approaches to enable adaptation to ongoing technological advancements. New roles are anticipated in the areas of supporting consumers, care delivery and digital technology. A recent roundtable of Australian experts and stakeholders have expanded on this to identify the need for “digital health navigator” roles to support not only consumers but the workforce in the use of digital technology.

The Review emphasises that people’s equality of access to digital care, equal quality of health care and equal health outcomes from virtual care must address the development of consumers’ and digital skills and enable consumers to effectively engage in virtual health.

Health system Organisation

Importantly this review notes that the complexity of a health system with centralisation of some aspects of funding and regulation with organisation of delivery of care being a regional government responsibility may clearly be a key issue in the disconnect within the Australian health system. The Federal Government largely funds primary care and has over the years driven technical innovation through such things as primary care focussed incentive programs. **There is little or no coordination on digital health implementation across States' and Territories' care delivery systems** and there are inconsistencies in data management, access policies and practices and a poor integration of digitalised system across and between health, hospital, and primary care. Importantly the funding divide crease silos in care provision.

Investment

The time lag to develop evidence of costs and benefits can be a barrier to investment in virtual health. There is a need for stronger evidence that virtual health models are effective in improving care processes, quality of care, clinical safety, and improved health outcomes. Government has a clear role in creating conditions conducive to achieving the transition to virtual health care including standards and regulatory systems as well as measures that can support investment with the underlying objective of realising improved consumer health outcomes. Regulatory processes must encompass data sharing and data security to address consumer concerns related to privacy and data control as a key element in achieving consumer acceptance and adoption.

CONCLUSION

The Rapid Review presents an overview of current and future virtual health models and approaches that need to change to support their implementation. The specific aim of the Review was to understand how virtual health can effectively enhance existing models of care or contribute to new models of care. Consistent with policy shifts to person centred approaches a key theme of the Review is the role of virtual health models in empowering consumers, particularly in self-care activities.

The Rapid Review of virtual health highlights a vision of the future with consumer-centric virtual health provided at a time, place and in a format of choice that will not only enable individuals to have greater control in improving health and well-being but support their health providers to deliver improved health outcomes through improved data sharing, decision making and clinical safety.