Reimagining healthcare in Australia: the role of digital in future health delivery

The COVID-19 pandemic has led to an unprecedented uptake in telehealth across Australia in both primary and specialist services and across urban as well as rural and remote settings. This has been driven by necessity in terms of the need for reduced face-to-face contact and supported by interventions such as the Federal release of MBS related telehealth items.

There has generally been wide-spread support and acceptance amongst consumers and clinicians for the rapid increase in telehealth during the pandemic and, on many levels, the rollout has been a remarkable success.

Many are now reflecting on how this rapid uptake in telehealth can be both sustained and leveraged to support the integration of technology more fully into health prevention and health care. There is a clear potential to deliver new, consumer-centric virtual health models that support the move from reactive to more proactive health management. These models need to be developed in a way that support both consumer and clinician needs and expectations regarding future health management and care delivery.

In support of this opportunity, the Digital Health Collaborative Research Centre (DHCRC), Deloitte and the Consumers’ Health Forum (CHF) are partnering to define a roadmap for reimagined healthcare.

The collaboration will commence with a national webinar on 10 September 2020 involving keynotes from Brendan Murphy, Secretary, Australian Department of Health; Leanne Wells, CEO of CHF; Steve Hambleton, Board Director DHCRC; Mark Simpson CCIO, NSW; Kulleni Gebreyes, Clinician futurist and Principal, Deloitte; and Gabrielle O’Kane, CEO, National Rural Health Alliance.

This will be followed by the development of a white paper on virtual care and a concurrent post-implementation review of the experience and expectations of consumers surrounding telehealth and virtual care led by Curtin University and CHF.

This work will inform an integrated program of research and development by the DHCRC and partners over the next five years. This will be responsive to both the immediate needs for information and evaluation as a result of COVID-19, through to a longer-term review of how digital technologies are used to support integrated, virtual health care over the medium and longer term. This work will also provide a basis from which the partners can contribute to policy discussions and national discourse about future health care directions.

Examples of virtual health

There are multiple of examples of virtual health care that are in place or emerging in the Australian healthcare environment. These include:

- The longstanding application of telehealth services in rural and remote locations
• Introduction of virtual hospitals or hospitals in the home, including the remote monitoring of patients and virtual consultations
• The integration of consumer data and digital tools to promote coordination and integration of care across primary, acute and community care services
• The use of multi-channel digital communication tools to influence patient trajectories and promote behaviour change
• The use of AI to identify consumers at risk of poor outcomes and guide targeted digital interventions
• The introduction of consumer portals and online booking systems
• The explosion in the use of apps, devices and websites in the health and wellness space

The challenge is that many of these innovations are in the early stages of application and are often not scalable or integrated into mainstream care or health management. In addition, the evidence-based behind the efficacy and safety of these programs is still forming.

Key questions

This discussion paper poses the following key questions that need to be addressed regarding how we move towards virtual health and care from a consumer, funder, government, clinician, service, and technology provider perspective. These questions will guide the research and development program and have been derived from consultation with DHCRC partners, thought leaders and review of key documents.

Statement of aspiration and questions from a consumer perspective:

Reimagined healthcare will be personalised, regard consumers as partners in care and empower them to make informed choices around where and how they access healthcare. This will be characterised by factors that contribute to informed choice and self-management, such as: the socio-cultural support to assist consumers to become proactive consumers of health services; strategies to motivate consumers to actively manage healthy lifestyles; the move from paternalistic to consumer centred care models; and the prerequisites for accessing care with the aid of technology, whilst avoiding the creation of a digital divide.

• How will virtual care change how my care is delivered? How will quality and safety be assured?
• How can virtual care activate and motivate me to look after my wellbeing, keep healthy and more effectively self-manage my conditions?
• Will virtual care increase or decrease the cost of my care?
• Will new technologies be easy to use, will they be compatible with my existing digital communication tools and how will I be supported to use these new technologies and tools?
• Will virtual care improve my experience of care?
• Will virtual care improve my health outcomes?
• Will virtual care make my care more convenient and accessible?
• Will virtual care make it easier for me to navigate between my care providers and integrate my care better?
• Will my data be available to all my care providers in my healthcare journey and as I move along different healthcare pathways?
• What controls and measures will exist to assure privacy and obtain consent to how my data is used?
• How will virtual care be adapted to meet the needs of people from diverse cultural and linguistic backgrounds and other vulnerable population groups?

Statement of aspiration and questions from a government or funder perspective:

Reimagined healthcare requires a robust and agile policy and regulatory framework to support and incentivise the re-design and delivery of services focused on improving value. New service models will need to retain the confidence of government and funders regarding their sustainability and ability to demonstrate benefits while maintaining safety and quality. New models will also need to reflect changing social determinants of health and overcome service fragmentation through system redesign. The role of governments and regulators will be as active enablers of interoperability and facilitators of innovation.

• What are the important lessons learnt form the COVID-19 Pandemic?
• What are the ongoing policy and funding implications of continuing the MBS telehealth items?
• What funding and policy models best support the introduction more integrated and proactive virtual models of health and healthcare (e.g. impact of capitation, impact on pricing models, incentives/disincentives etc)?
• What is the impact of virtual models of care on patient outcomes and the safety and value of care?
• What is the role of government and funders in supporting consistency and standardisation, including development of standards in virtual care (e.g. interoperability standards)?
• Are current regulatory and oversight frameworks adequate to support the safe and effective delivery of virtual care (e.g. software as a medical device, data governance, ethics and ownership)? If not, what changes will be required to regulatory frameworks?
• How do we support data and information flow across the health system during virtual care delivery (e.g. linkage of App or device with EMR)?
• What policy changes are required to support joint planning at the local level to ensure integration of virtual care pathways across primary and acute care?
• How do we work with technology providers to support robust and scalable solutions while maintaining local innovation and diversity?
• How do we develop social licence with consumers to support increasing virtual care?
• What monitoring and incentives will be required to assure equitable access to virtual care?
Statement of aspiration and questions from a clinician perspective:

Reimagined healthcare will see healthcare journeys and pathways redesigned to enable multidisciplinary and holistic care. This redesign will offer clinicians technology platforms that are intuitive to use, are integrated into the clinical workflow and support frictionless communications. There is an opportunity to surprise rural communities that their clinicians can deliver the full scope of clinical practice without any reduction in quality or outcome. So too, there is the opportunity to offer remote monitoring for supervision and training of clinicians; and there is real opportunity to reduce administrative burden, whilst enhancing workflow effectiveness, through decision support which enhances the therapeutic relationship.

• How will virtual care change my day-to-day practice and how I interact with patients?
• How will virtual care enable me to operate at my full scope of practice?
• Will virtual care improve my patient’s outcomes and be safe and secure?
• For which health conditions and patients will virtual care be most effective?
• How will I integrate virtual care into my normal practice routines and workflows - will it be easy to use and save time?
• Will virtual care impact on my scope of practice?
• Will funding arrangements be changed to make virtual care sustainable?
• What are the medico-legal implications of introducing virtual care into my practice?
• How will virtual care impact on my relationship with my patients and colleagues?
• What new skills may I need to deliver virtual care and will this impact on my registration/accreditation requirements?

Statement of aspiration and questions from a service provider perspective:

Existing service providers and those in the future will be looking to differentiate their service offerings through a better-connected consumer and clinician experience. They are looking at genuine sustainable transformation that simultaneously delivers high quality outcomes and positive care experiences for consumers and the local and surrounding communities of which they are a core part. In transforming their delivery models, service providers will be focused on supporting and empowering their whole workforce as they move to redefined roles, appropriately enabled through digital technology.

• What would introducing virtual care today mean for my organisation? How – and how fast - might virtual care change over the coming years?
• How can virtual care be funded to achieve a financially sustainable and effective health care system?
• What change management will be required to support new virtual models of health and health care?
• What impact will virtual care have on coordination and integration of care at a local level and who will coordinate this?
• How do we empower patients in self-care and access their own data?
• Which virtual care applications are cost effective and represent best value?
• What needs to be done to successfully integrate virtual care into everyday practice and workflows including electronic health records?
• How can virtual care be funded to achieve a financially sustainable and effective health care system?
• Will virtual health and healthcare result in the development of new disruptive health and health care providers and models that will challenge our existing business and service models?

Statement of aspiration and questions from a technology provider perspective:

Reimagined healthcare in Australia will see a vibrant and deep health technology sector that understands the vision for healthcare, and is closely engaged with consumers, clinicians and the broader economy to accelerate this vision. Technology providers will have good visibility for of the regulatory and competitive frameworks with which to engage to inform investment and contribute to innovation.

• What standards do I need to comply with to develop products to support virtual care?
• How do I interface my systems and data with other providers?
• How do I access markets for my products and engage with funders and government?
• How do I evaluate the impact of my products?
• How do we balance ease of use with meeting regulatory requirements?
• How do I engage providers, clinicians and consumers in co-development and optimisation of product?

Conclusion and contact information

We invite our key partners to ratify and add to these key research questions. We will then provide a rapid reflection regarding the current state of thought nationally and internationally regarding these key questions.

This will be used to inform the webinar, white paper and developing research program.

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