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Virtual care post-pandemic: Why user engagement is critical to create and optimise future models of care

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Abstract

Health systems are shifting from the use of virtual models of care reactively in response to the conditions of the pandemic, to deliberate planning for the integration of virtual models to enhance and extend current service provision. Use of virtual care in recent years has highlighted the critical role of clinician and consumer behaviour and mindsets in realising the opportunities of virtual care for improved health care and outcomes. Yet, the rapid and changing circumstances of the pandemic period provided limited opportunities for effective involvement of both clinicians and consumers in health system decision-making about when, how and which virtual services and associated technologies should be deployed. We explore the opportunity for enhanced engagement with these primary stakeholder groups to create quality healthcare as we emerge from the pandemic and enter a new phase of integrated virtual services.

Keywords

User engagement, patient involvement, clinician engagement, virtual care, models of care

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Introduction

Applications of virtual care have been illuminated by the COVID-19 pandemic, leading to a rapid acceleration in knowledge about the potential gains and the unintended consequences of virtual models and the associated technologies. Local and system-wide evaluation of the technologies and models of care that support virtual service delivery have provided evidence of the applications and limitations of virtual services across specialties, populations and contexts.[1] Health systems worldwide are now amid further calibration as service providers determine the virtual care models that should continue to be supported and those that require expansion or retraction as opportunities for in-person care return.[2] Healthcare consumers and clinicians are directly affected by these decisions. Recalibration, therefore, requires a collaborative approach between health services and these primary stakeholders to ensure that future applications of virtual care can create high-quality care. But how are decisions being made about the relative risks and benefits of virtual models for individual health services and across health systems? We explore the role of clinician and consumer engagement in decision-making about when, how and which virtual services and associated technologies should be deployed, and the implications for healthcare leaders.

Embedding virtual models in service delivery

During COVID-19, virtual care has been used in a wide range of service areas, with evidence of varying impacts for consumers and clinicians. Consumers predominantly report improvements in access to care, service efficiency and being able to access multidisciplinary teams.[2] Clinician experiences reflect perceptions of improved care access and efficiency, but identify procedural, technological

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and infrastructure challenges when seeking to work virtually or in hybrid virtual and in-person models.[3,4] Notably, both groups report that gains are not universal, with particular populations or health condition groups receiving poorer quality of care along with inequitable access due to virtual working.[1,5,6] The diverse impacts of virtual care on healthcare experiences and outcomes contribute to varied perspectives among clinicians and consumers about the virtual models that should be sustained or halted, and the technologies that best support practice. Healthcare leaders, therefore, need to provide strong rationale for decisions about sustaining, expanding or disbanding virtual services, both to justify their budgets and to ensure virtual models are successfully embedded into existing systems, processes and healthcare infrastructure.[1,7]

Clinician and consumer engagement as central to the adoption of new practices

An expansive and growing evidence base demonstrates the early impacts of virtual care models, but also highlights the behavioural and cultural changes required of both clinicians and consumers to adapt to virtual and hybrid models of care. Several studies demonstrate that higher levels of patient and carer engagement in care processes (e.g. by entering information, undertaking activities and using devices or software) appear to contribute to improved health outcomes when using virtual services.[8] Likewise, the success of virtual and hybrid models in improving health experiences and outcomes is contingent on clinicians making adaptations in their practice. Clinicians must learn new skills to use and integrate information from different sources and technologies, adopt new ways of working and approaches to patient care in response to novel care processes and greater opportunities for multidisciplinary team meeting and communication in virtual contexts.[5,9]

Table 1. Clinician engagement in virtual care.

Survey item (n = 488)	*M*
I have the skills and knowledge required to participate in decision-making about the use of virtual modes in my organisation.	3.67
I have the opportunity to participate in decision-making about the use of virtual modes in my organisation.	2.49
I have the capacity in my work arrangements to participate in decision-making about the use of virtual modes in my organisation.	3.00
There are mechanisms for me to take part in decision-making about the use of virtual modes in my organisation.	2.43
I have opportunities to collaborate in the process of making changes to use virtual modes in my organisation.	2.38
My voice is heard in the process of making changes to use virtual modes in my organisation.	2.37

Note: *Likert Scale 1(Not at all), 4 (Neutral) and 7 (Very Much So).*

Despite the centrality of consumer and clinician involvement in realising the opportunities of virtual care for improved health services and outcomes, there has been limited opportunity for these primary service users to contribute to decision-making about the virtual care models and technologies being deployed during the pandemic. In our survey of physician engagement, well-being and organisational culture among members of the Ontario Hospital Association in Canada, 488 physicians reported an absence of opportunity and mechanisms to take part and collaborate in the process of decision-making about the use of virtual care in their organisation.[10] Specifically, respondents indicated that even when presented with opportunities to contribute, they faced multiple barriers because they did not have the skills, knowledge, or capacity in work arrangements to participate in service- or system-level decision-making processes (Table 1). The result of these barriers was that clinicians perceived their voices were not heard by those in decision-making roles in the process of making changes to the use of virtual models and the associated expectations of them in their practice. Consumer consultation and involvement were even less visible during the pandemic period, reflected in subsequent reports from major bodies in multiple health systems internationally.[11–13] Inequities in access to virtual services and health outcomes resulting from their use have been notable during the pandemic. Diverse consumer perspectives must therefore be considered in the emergence of the pandemic to ensure that health systems harness opportunities to use virtual care to redress inequities, but are also responsive to the unintended detrimental consequences of virtual care that impact consumer health.

Seizing the opportunity for engagement

Whilst user engagement is a central consideration in the field of digital health, lesser attention has been paid to ensuring that primary stakeholders are engaged in organisational and system-level decision-making processes about the technologies and services that will be deployed to provide virtual health care. User engagement at this level is important in order to establish shared goals about what health services aim to achieve through virtual care.[14] The rapid and unpredictable pace of change in the emergence of the COVID-19 pandemic inhibited user engagement in service and system-level decision-making about when, what and how virtual care services would be used. Emergence from the pandemic is slower and brings with it

data about the use of virtual technologies and models of care that resulted from our experiences. The process of embedding virtual care on a more permanent basis has commenced, with payment arrangements being addressed in multiple health systems including those in Canada and Australia.[15] This is, therefore, a critical period for health system and service leaders to seize the opportunity to engage with their staff and consumers to determine the models of care and the technologies that best support high-quality care.

Our data demonstrate that key focus areas are developing mechanisms for clinicians and consumers to contribute directly to transparent decision-making processes about (a) the purpose of virtual services, (b) what will be retained, further adapted or integrated and (c) the technologies that may best support high-quality practice and system-wide integration to mitigate exacerbating current and ongoing challenges of poor interfacing between technology and systems. Creating system-wide forums for dialogue about the future use of virtual care is an initial step. Critically, these must be supported by feedback and collaborative design opportunities. Numerous consumer organisations have released calls for consumer engagement opportunities to be made available in relation to the future of virtual care, yet few examples of opportunities for consumer contributions are currently documented.[16]

Taking a collaborative design standpoint

Embedding collaborative design at a system-wide level provides a framework for progressing beyond gathering experiential data *from* consumers and staff. Bringing consumers and staff together to *create* contemporary virtual care models provides a basis for successful long-term use of virtual care. Within collaborative design processes, the vast and varied impacts of virtual care on healthcare service models, experiences and outcomes must be reflected in diverse consumer and staff participation in decision-making activities.[17] Diverse and deep engagement is contingent upon creating capacity in work arrangements to enable healthcare staff from all professions and areas to contribute, creating enduring and valued relationships with a broad range of consumer communities, but also ensuring that both groups see how their contributions shape action.

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