Telehealth quality check

Is it time for national standards?

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Background
Telehealth has seen rapid but unregulated growth in Australia during the COVID-19 pandemic, facilitated by the interim establishment of a universal Medicare Benefits Schedule item for telehealth consultations. Consumers and healthcare providers, including many general practitioners, have turned to telehealth with enthusiasm.

Objective
The aim of this article is to present evidence and analysis supporting the adoption of national telehealth standards in Australia.

Discussion
Despite efforts by professional organisations to develop telehealth standards, Australia lacks a national telehealth strategy and a unified set of shared standards for clinical governance and quality assurance that can be applied across the health system. To ensure consumer safety and support healthcare providers in telehealth, a national regulatory framework and telehealth standards should be established on the basis of the latest evidence on safety and quality in all forms of telehealth.

WHAT A DIFFERENCE A PANDEMIC MAKES.
Telehealth in Australia, long considered a niche modality of primary and specialist care for those in rural and remote areas, has finally come of age. With the introduction of special Medicare Benefits Schedule (MBS) items for telehealth during the COVID-19 pandemic, now extended to December 2021, telehealth consultations have been booming. In the 13 months from mid-March 2020 to mid-April 2021, more than 56 million MBS telehealth services were provided to more than 13 million patients, with almost $3 billion in MBS benefits paid. In excess of 83,540 providers – including general practitioners (GPs) and other medical practitioners, nurse practitioners, midwives, allied health and dental practitioners – have used telehealth services.[1] This contrasts sharply with pre-pandemic MBS taskforce recommendations for the gradual removal of telehealth billing incentives.[2] While in-person visits to healthcare providers dropped fast and early in the pandemic, by June 2020 telehealth consultations in general practice had more than made up for the reduction in face-to-face consultations.[3] Expansion of remote cancer care,[4] remote aged care consultations and 24/7 availability of COVID-19 primary care advice[5] are some examples of the way in which telehealth has been used in diverse settings, well beyond the conventional remit of assessment and advice to those living in rural and remote Australia. Less-publicised trends are the growing use of health contact centres by consumers around Australia over the past decade[6] and the rapid development of new digital platforms to support provision of health assessment, advice and referral via phone, video consultations and online.[4,7] Although the Australian Department of Health has stipulated that video consultation is the preferred telehealth delivery mode,[8] the vast majority of telehealth consultations during the pandemic have been delivered by telephone.[3,9] From July 2021, a lower rebate for audio-only long consultations (C and D) than video has been implemented.[9] Delivery of video consultations is highly dependent on the adoption and rapid scale-up of appropriate digital infrastructure.[10] Telehealth use figures during the pandemic suggest that few GPs were able to move quickly to more advanced digital capability, and possibly that consumers themselves were not prepared or able to move beyond the familiar communication mode of the telephone.[3] It appears that audio-only telehealth was the default delivery mode for most providers. For people in disadvantaged groups – such as the frail elderly, people with disabilities and people from non–English speaking backgrounds – the digital health divide can be a source of inequity and may be a barrier to receiving high-quality care.[11] Given the rapid,

relatively unplanned and widespread uptake of telehealth and the potential for some consumer groups to be systemically disadvantaged in accessing telehealth, there is an urgent need to assure the quality, safety and accessibility of healthcare delivered through information and communication technology (ICT). The aim of this article is to present evidence and analysis supporting the adoption of national telehealth standards in Australia.

The World Health Organization defines telehealth as:[12]

> *The delivery of health care services, where distance is a critical factor, by all health care professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of health care providers, all in the interests of advancing the health of individuals and their communities.*

Telehealth can occur in a variety of transactional forms (Table 1).[13] These modes of telehealth can be further segmented into synchronous (real-time consultations) and asynchronous exchanges of information and treatment advice, either by email or through internet-based portals.[14,15] In Australia, only synchronous telehealth is covered under the MBS, although it may be supported by other non-synchronous exchanges such as sending a prescription electronically. During the COVID-19 pandemic, there has been a rapid growth in the consumer-to-provider category of telehealth, particularly in general practice.

Safety

As telehealth grows in popularity among consumers and providers, how can we be assured that consumers are receiving health advice and care of the standard applied in face-to-face care? The evidence regarding the safety of telehealth is somewhat patchy across different modalities. In the consumer-to-provider category, the safety of national and regional telephone triage and advice services has been studied widely. While these services have been found to be generally safe, variability of clinical appropriateness of outcomes within and across services has been found, and adverse events, while uncommon, have occurred.[16,17] In the more traditional telehealth delivery modes of provider-to-consumer and the provider-to-provider categories, usually undertaken as video consultations, a range of studies and systematic reviews in diverse areas of healthcare including diabetes,[18] cardiac care[19] and mental health[20] have found telehealth consultations to be safe and linked to improved outcomes for patients who would otherwise have had limited access to a health provider consultation, although a range of risks to patient safety have been identified.[21] Monitoring of chronic conditions using telehealth and remote monitoring technology has even been found to be more effective than face-to-face monitoring.[14] While video consultations have been found to have higher diagnostic accuracy and result in fewer medication errors than telephone consultations, patient outcomes are generally similar.[22] There is some evidence that telehealth can prevent unnecessary ambulance call outs and emergency department attendance.[23,24]

Nonetheless, patient safety can be threatened in other ways. Recent cybersecurity and patient data breaches have highlighted the need to entrench professional standards and codes of behaviour in the health technology sector.[25,26] Cybersecurity is a critical component of clinical safety in the digital age. It could be argued that the separation of the two contributes to the vulnerability of clinicians and hospitals to cyberattacks. The Victorian Auditor General's recent audit and recommendations highlight the risk to patient safety in cybersecurity breaches and flag an era of clinician responsibility and liability for patient data breaches.[27] Little is known about either the clinical safety or the storage and security of patient data during Australia's rush to mainly audio telehealth delivery. The absence of national safety and quality metrics hampers standardised approaches to evaluating telehealth implementation.

Table 1. Telehealth transactional forms, adapted from URAC[13]

Form	Characteristics	Example
Consumer to provider/patient initiated	Typically on demand and episodic in circumstances where the consumer may be unknown to the provider	Nurse-on-call service
Consumer to provider	Typically on demand and episodic but the patient is known to the provider and continuity of care is prioritised	Royal Flying Doctor Service in remote Australia[38] Telephone consultations in general practice during the pandemic
Provider initiated	Typically based on an existing provider–consumer relationship	Monitoring of chronic disease management
Provider to provider	Frequently used for provision of specialised advice and assessment between two or more providers	Pain specialist providing guidance to a country general practitioner on pain management for a mutual patient

Clinical governance

Australia lacks a single coherent set of quality standards that covers all forms of telehealth. This results in variable approaches to telehealth service implementation across the public and private sectors in healthcare. Currently a patient can expect to have to navigate multiple platforms and apps in order to access care via telehealth, and this has become even more varied during the COVID-19 pandemic.[4] There are also significant pre-existing gaps in access to interpreter services, with associated poorer outcomes for linguistically diverse patients.[28] A number of organisations have shown leadership in this space nonetheless. The Australian College of Rural and Remote Medicine (ACRRM) produced telehealth guidelines as early as 2012, updated in 2016;[29] the Medical Board of Australia also released guidelines in 2012 for 'technology-based patient consultations';[30] the Telehealth Association of Australia released a discussion paper in 2012 calling for the establishment of a national telehealth strategy,[31] which went unheeded by the Government; and The Royal Australian College of General Practitioners (RACGP) updated its telehealth guidance in 2020 with the release of the *Guide to providing telephone and video consultations in general practice*, providing timely advice for the rapid expansion of telehealth in primary care settings.[32] The National Digital Health Strategy identifies telehealth as an important element of digitally enabled models of care but does not go so far as to identify standards for such services.[33]

Significant progress in identifying quality standards for telehealth occurred in 2019 when Standards Australia, in collaboration with an alliance of health contact centre operators and telehealth experts, published the first Australian Standard for Health Contact Centres.[34] This Standard goes into considerably more detail than other Australian guidance on various forms of telehealth but specifically limits its scope to 'health contact centres' and therefore does not explicitly speak to the plethora of patient- and provider-initiated telehealth services now occurring in general practice clinics, hospitals and non-GP specialist rooms across the country. The Standard includes standards for organisational and clinical governance; patient safety and associated clinical and cultural appropriateness in handling patient contacts; communication protocols for various scenarios such as emergencies and frequent users; service continuity, reliability and interoperability; workforce planning, training and health professional credentialling; information and data management including considerations of privacy, security, confidentiality, storage, quality and accessibility of data, and the procurement, maintenance and currency of technical systems to support health contact centre functions.[34] The Standard is arguably a useful resource for the now-normalised provision of telehealth services occurring in settings beyond the health contact centre, but it was not developed for this purpose.

Assuring quality in a new telehealth normal

Given the rapid expansion of MBS-supported telehealth and the likely continued growth in this form of healthcare, driven by both consumer preference and commercial opportunity, we need to ensure that safe, ethical, culturally appropriate and technically sound care is being delivered. A number of commentators have highlighted the urgent need for a single unified set of standards for all forms of telehealth delivery[35] and clarification of the regulatory environment.[4] In other parts of the world, such as the USA[13] and Canada,[36] national accreditation agencies and standards are in place for all forms of telehealth. In the UK, adoption of regulatory and quality standards for telehealth has been slower, with the General Medical Council releasing in September 2020 a commissioned review of telehealth regulatory approaches and standards around the world as a forerunner to development of a UK regulatory framework for telehealth.[37] Following the lead of international counterparts, Australia urgently needs to review the evidence related to telehealth regulation and clinical governance to inform efficient decision making going forward.

Conclusion

With no clear end in sight for the pandemic, the healthcare consumers and providers of Australia have placed their confidence in telehealth services, and it is critical that this confidence is not misplaced. Whether it is a universally applicable set of standards across all forms of telehealth or a national telehealth accreditation system, it is vital that telehealth in Australia has robust quality measures in place. Ideally such frameworks would be underpinned by a national strategy for telehealth, as evidence of a long-term policy commitment to telehealth.

Key points

- In the first 13 months of a universal MBS item for telehealth during the COVID-19 pandemic, now extended to December 2021, telehealth consultations have exceeded 56 million.
- Currently patients may need to navigate multiple platforms and apps in order to access care via telehealth from different providers.
- The absence of national safety and quality metrics hampers standardised approaches to evaluating telehealth implementation in Australia.
- In other parts of the world, such as the USA and Canada, national accreditation agencies and standards are in place for all forms of telehealth.
- A national set of standards across all forms of telehealth or a national telehealth accreditation system is vital for telehealth quality.

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