Telehealth as a tool for equity: pros, cons and recommendations

Jason Gurney, Lily Fraser, Amio Ikihele,
John Manderson, Nina Scott, Bridget Robson

The COVID-19 crisis has forced an abrupt change to the way our society functions. Two of our most critical sectors—education and health—have had to rapidly embrace digital technology in order to continue to provide key services to the public. Before the start of the second school term, and within a few weeks of our move to Alert Level 4, the New Zealand Government began distributing more than 17,000 digital devices to school students around the country.[1] In addition, thousands of modems were circulated to households without current internet access—all in an effort to bridge the digital divide and enable online learning amid the COVID-19 shutdown.[2]

In the context of health, clinical consultations that do not require in-person contact have moved to phone calls and videoconferences. For example, the Royal New Zealand College of General Practitioners (RNZCGP) made an urgent request for their members to use phone, email or video to reduce in-person consultations by 70%.[3] Minimising contact between ill patients, their doctors and the public is a necessary component of our COVID-19 elimination strategy,[4] and these (and other) telehealth tools help us to achieve this goal. They also allow at least part of our clinical pathway to continue to provide patients with access to care throughout a national shutdown.

Māori and Pacific people shoulder a disproportionate burden of morbidity. We are more likely to have cardiovascular disease, cerebrovascular disease, cancer, respiratory disease, infectious disease and psychological distress than non-Māori non-Pacific people.[5,6] On top of this increased burden, there is evidence that Māori have poorer access to healthcare, including primary care[5] as well as secondary care for services such as cancer diagnosis and treatment.[7] Pacific people similarly report higher rates of unmet need for primary healthcare and secondary care services.[8] In short: these persisting health inequities highlight the fact that Māori and Pacific people have a greater need for healthcare, but poorer access to it.

The factors that drive poor healthcare access for Māori and Pacific peoples are multifactorial, but ultimately these factors reflect a disproportionate exposure to the multiple determinants of poor health (including health systems and social determinants such as socioeconomic deprivation and institutionalised racism).[8,9] These are the social determinants that manifest as barriers to healthcare access for Māori and Pacific people: transportation barriers that prevent access to in-person appointments; financial barriers that prevent paying for general practitioner (GP) visits or medication; and cultural barriers that prevent access to a service that was not necessarily designed to align with Māori and Pacific worldviews of health—with the understanding that access is not solely premised by availability and affordability, but also acceptability of services for Maori and Pacific people.

In this viewpoint, we consider whether telehealth is an equity-positive tool that might help to overcome some important barriers to health care access for Māori and Pacific people. We consider the equity ramifications of a shift toward models of care that maximise the use of telehealth solutions, and our recommendations regard how we might best achieve the equity-positive potential of telehealth for Māori and Pacific people.

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Opportunities

Telehealth can reduce barriers to care. Since telehealth reduces or removes the requirement for patients to travel to receive care, it follows that telehealth can improve access to care among those who have transport barriers.[10–12] By removing the necessity to travel for care, telehealth also reduces the time commitment required by patients and their whānau, further improving access to care. In addition, since remote telehealth consultations can conceivably be conducted from anywhere in the country, the pool of clinical expertise available to a given individual can feasibly expand—a key consideration for Māori [13] and Pacific (as well as non-Māori non-Pacific) people living in rural or small urban centres. Telehealth consultations may also improve accessibility of the consultation to wider whānau (who may either be with the patient or in another part of the country), improving support for the patient and enabling informed collective decision-making. Similarly, telehealth can also reduce the indirect costs of healthcare; if patients or their whānau need to take paid or unpaid leave, or cover the costs of travel or childcare, then the option of telehealth could be health-enhancing simply by protecting the patient's and whānau's social and economic resources.

Telehealth can enhance the quality of holistic care. During the COVID-19 pandemic, telehealth has enabled a holistic and whānau-inclusive approach to healthcare delivery. Multiple call centres have been organised and run by iwi, hauora Māori providers and community groups. These organisations assess needs and offer a range of solutions, from delivering food and personal care items through to financial, housing and medical support (personal communication, Nina Scott).

Telehealth can reduce exposure to infectious diseases. Reducing patient contact with healthcare services reduces the risk of healthcare-associated infection (also known as nosocomial infection). Although this is a key consideration amid the current COVID-19 pandemic, we also note that Māori and Pacific people are at higher risk of multiple other infectious diseases—including influenza,[14,15] tuberculosis,[16] meningococcal disease,[17] measles[18] and the sequelae of streptococcal infection including rheumatic fever.[19,20] While these disparities in risk of infectious disease are likely driven by disparities in exposure to poor housing and overcrowding,[21,22] they indicate that community transmission of infectious disease disproportionately impacts Māori and Pacific—and reducing or eliminating one source (healthcare-associated infection) of possible exposure may have significant ramifications in terms of the wider burden of infectious disease for Māori and Pacific people.

Telehealth may enable the redirection of health resources toward areas of need. As noted below, due to issues of digital inclusion, Māori and Pacific communities may not stand to benefit from telehealth consultations as readily as other New Zealanders. The efficiencies gained through widespread implementation of telehealth may free-up resources that can be used to provide more support for those who are currently digitally excluded (and who may have less access to health information and care overall). If this resource is re-directed based on unmet need and longstanding health inequity, such a re-direction may benefit Māori and Pacific health.

Barriers

Widespread implementation of telehealth may increase health disparities. Telehealth care can only be provided to a patient if they have the resources required to access it. Some telehealth can be delivered via phone, and some requires digital technologies such as video and data. Without an equity-first approach to telehealth in New Zealand, it is likely that uptake will be difficult for individuals and communities with insufficient access to mobile phones and the internet (and/or the digital literacy to use these tools), compared to those who have these resources.[23] It is clear that Māori and Pacific have less access to digital technology than other population groups,[24–26] and this gap will need to be bridged to ensure that telehealth does not exacerbate the existing health inequities experienced by Māori and Pacific communities.[5,6]

Only some health care can be provided remotely. Although we have noted above that telehealth may be a solution to transport barriers to healthcare, not all

care can be delivered via telehealth—and as such, telehealth does not solve all transport barriers to care. In addition, it is conceivable that our system could start to over-rely on telehealth once its efficiencies are recognised, which could potential result in attempts to provide telehealth care in cases where in-person care would result in a better outcome for the patient (see below).

Loss of in-person care. Many Māori value kanohi ki te kanohi interaction, as in-person communication may result in better outcomes from the conversation.[27] Pacific people also place great emphasis on relationships and nurturing the space (va) that connects people, things and elements,[8] which can be lost with telehealth consultations. As such, the replacement of in-person interaction with telehealth solutions requires rapid research regarding its acceptability for Māori and Pacific people, as well as assessments of the impact of this replacement on health outcomes. Another factor that requires careful consideration is whether telehealth may preclude the detection and treatment of conditions other than the primary reason for the consultation.

Technical barriers. Technical barriers to the equitable provision of telehealth for Māori and Pacific people include (but are not limited to): the availability of telephone or internet connection; device availability (including telephones and other communication devices); digital literacy/education regarding device usage; infrastructure, education and resourcing within Māori and Pacific health providers to provide telehealth to their communities; and attitudinal barriers to telehealth uptake among some health professionals. Each of these (and others) will need to be overcome to ensure equitable provision of telehealth care.

Recommendations

- *We need to collect high-quality data on telehealth connectivity.* Addressing digital inclusion for Māori and Pacific people to facilitate telehealth care provision requires good data on digital connectivity. We believe that connectivity should be considered a health-related exposure, and data on connectivity should be collected just like ethnicity or age data. The rapid adoption and submission of telephone data in the Ministry of Health National Collections shows district health boards (DHBs) should also be able to improve the quality of telehealth data to more accurately show how outpatient care is delivered.
- *We need to address digital inclusion for Māori and Pacific people.* Linked to the above point, we need to better understand the extent of digital poverty in New Zealand, with a focus on digital poverty among Māori and Pacific people. Māori and Pacific must be viewed as priority populations in the allocation of digital devices and data packs.
- *We need resourced champions*. In order to facilitate equitable telehealth provision to Māori and Pacific communities, we need to resource organisations and individuals who can communicate and enact telehealth into their communities. Some enablers of these champions already exist, such as the Marae Digital Connectivity initiative[28] and the Pacific Senior Connect[29] and Digifale[30] programmes provided through churches.
- *We need more research.* Our understanding of the impact of telehealth on Māori and Pacific experiences of healthcare in New Zealand is extremely limited. We need research led by Māori for Māori, and by Pacific for Pacific, to understand their approach to telehealth and their experience of it, with a view to informing an equity-first telehealth strategy (see below).
- *We need a strategy.* We recommend the rapid development and implementation of a robust telehealth strategy (such as that developed for New South Wales in Australia)[31] that has te Tiriti o Waitangi and equity as core guiding principles. The development of this strategy must occur in partnership with Māori (as Crown partners in Te Tiriti, and as a population with substantial unmet healthcare need) and Pacific health leaders, organisations and individuals. Part of this strategy must include ongoing monitoring and evaluation of telehealth provision in New Zealand and the impact of telehealth on the equitable provision of healthcare to Māori and Pacific New Zealanders.

The move to telehealth consultations during the COVID-19 shutdown in early 2020 was made out of necessity. Data recently extracted by the Ministry of Health's Telehealth Leadership Group suggests that, over the month of April 2020, the health sector moved to providing nearly half of all first specialist appointment (FSA) and follow-up appointments via telephone (personal communication, John Manderson)—an example of swift action in the face of immediate need. As alert levels drop and contact restrictions ease, we must ensure that the aspects of telehealth that help to address health inequities for Māori and Pacific people—such as reducing barriers to care—are maximised, and that the aspects of telehealth that could exacerbate inequities—including digital poverty—are addressed and eliminated.

Competing interests:

Nil.

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Author information:

Jason Gurney: Cancer and Chronic Conditions (C3) Research Group, Department of Public Health, University of Otago, Wellington.
Lily Fraser: Turuki Health Care, Auckland. Amio Ikihele: Moana Research, Auckland and School of Population Health, University of Auckland, Auckland.
John Manderson: Ministry of Health Telehealth Leadership Group, Wellington and Te Aho o Te Kahu – Cancer Control Agency, Wellington.
Nina Scott: Waikato District Health Board, Hamilton.

Corresponding author:

Jason K. Gurney, Department of Public Health, University of Otago, Wellington, New Zealand, PO Box 7343, Wellington, New Zealand
jason.gurney@otago.ac.nz

URL:

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