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General practice perspective on the use of telehealth during the COVID-19 pandemic in Australia using an Action Research approach: a qualitative study

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ABSTRACT

Objectives Telehealth has emerged as a viable and safe mode of care delivery in Australia during the COVID-19 pandemic. However, electronic general practice data reveal differences in uptake and consultation mode, which we hypothesise may be due to potential barriers impacting on quality of care. We aimed to identify the benefits and barriers of telehealth use in general practice, using an 'Action Research' approach involving general practitioners (GPs) and general practice stakeholders.

Design Qualitative focus group performed within a broader Action Research methodology.

Setting A focus group was held in August 2021, with general practice participants from Victoria, Australia.

Participants The study consisted of a purposive sample of 11 participants, including GPs (n=4), representatives from three primary health networks (n=4) and data custodian representatives (n=3) who were part of a project stakeholder group guided by an Action Research approach.

Methods Semistructured interview questions were used to guide focus group discussions via videoconference, which were recorded and transcribed verbatim for analysis. The transcript was analysed using an inductive thematic approach.

Results Emerging themes included evolution of telehealth, barriers to telehealth (privacy, eligibility, technology, quality of care, sociodemographic and residential aged care barriers) and benefits of telehealth (practice, quality of care, sociodemographic and residential aged care benefits).

Conclusion The findings highlight a range of barriers to telehealth that impact general practice, but also provide justification for the continuation and development of telehealth. These results provide important context to support data-driven population-based findings on telehealth uptake. They also highlight areas of quality improvement for the enhancement of telehealth as a valuable tool for routine general practice patient care.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ Timing of the study (August 2021) means that general practitioners (GPs) have had time to use telehealth for over a year, beyond the typical 'shakedown' period.

⇒ Captures major waves and lockdown periods in Australia, both prevaccine and postvaccine availability.

⇒ The Action Research approach allows practitioners and primary health networks to contribute to research as participants and use their involvement to improve practice.

⇒ Relatively small sample size but greater depth of participation and engagement of participants than a typical qualitative interview.

⇒ Timing of the study may not reflect more recent GP experiences due to the ever-changing COVID-19 pandemic and resultant policy challenges.

INTRODUCTION

The rapid implementation of telehealth has been hailed a successful intervention since its then-temporary introduction into the Medicare Benefits Schedule (MBS) in March 2020.[1] Telehealth has assisted in maintaining continuity of care in general practice and reducing face-to-face contact and COVID-19 transmission risk in both Australia and internationally,[2] especially in vulnerable populations such as aged care facilities[3] and as such has been extended indefinitely.[4] Despite this, reported differences in uptake and consultation mode during telehealth's expansion in a relatively short period raise concerns about barriers to telehealth and quality of care. Australian studies have revealed lower uptake of video consultations compared with telephone,[5–7] with 93% by telephone and only 7% by video in the second quarter of 2021.[7] There were lower rates of pathology test referrals for telehealth,[8] suggesting potential technology barriers and a potential patient safety risk. Another study revealed that fewer medications were prescribed during telehealth consultations than in-person consults.[9]

While these data-driven studies reveal differences between telehealth and face-to-face consultations, there is little evidence

to help explain the complexities and reasoning behind these variations. One recent study described general practitioners (GPs') perception of telehealth services, and found that GPs experienced financial pressure and concerns about quality of care related to the utilisation of telehealth.[5] Further qualitative research is needed to provide context specific to the observational findings and to contribute to meaningful improvements to the current general practice telehealth model in Australia.

Participatory Action Research is an approach that aims to enhance practice by building theory and changing practice simultaneously, and in conjunction with participants.[10 11] It shares characteristics with methods such as grounded theory, in that theorisation is not used to inform the method, but is part of the method.[12] By emphasising the partnership between researchers and participants it is particularly suited to healthcare environments.[10 11] One of its main benefits is to empower practitioners by allowing direct engagement with research, identifying problems in clinical practice[11] and contributing to subsequent interventions. In this study, it involves engaging with researchers[10] to identify research questions, seek and implement practical solutions, and systematically reflect on the process and outcomes, thus creating an ideal environment for the translation of findings but also, importantly, to gain a qualitative perspective on data from the GPs' own patient base.

We aimed to identify the benefits and barriers of telehealth use in general practice, guided by an Action Research approach involving GPs and general practice stakeholders, and to provide context for the data-driven findings of a larger programme of work.[13]

METHODS

We conducted a 90 min focus group. The interview format was semistructured and centred on the theme of telehealth use in general practice during the COVID-19 pandemic. Participants included researchers, GPs, data custodians and representatives from primary health networks (PHNs).

Participant selection and setting

The project management team were approached to assist with the identification of participants as part of a purposive sampling strategy. Candidates were considered suitable for inclusion if they displayed interest in collaboration on a research project and possessed a background in some facet of primary health (practice/governance/data). This resulted in a group of GPs, PHN representatives and data custodians (some of whom were members of the project management team) from three PHNs across Victoria, Australia. Our final sample (n=11) comprised participants from a total of 16 identified candidates who fulfilled the inclusion criteria. Participants were compensated by PHNs for their time.

As part of the Action Research approach, participants listed above were involved in the design, discussion, reporting and dissemination plans of our research throughout the entire research process. This included identification of problems, action and reflection on results and clinical context during the focus group (the focus of the current study) as well as during the overall research project. Data from the focus group and participants will also be used to inform the analysis of the quantitative arms of the study.

Data collection

The focus group was held via videoconference in August 2021, midway through the Delta variant wave of COVID-19 in Australia and during a lockdown of Victoria. Author R-AAH conducted the questioning, following a semistructured interview guide (**online supplemental box 1**) developed by the research team. Guiding questions were developed with the aim of gaining validation and context about data findings from a previous phase of the Action Research project focused on the impact of COVID-19 on care treands.[3 8 9 13 14] The focus group was recorded and transcribed verbatim, and was deidentified by removing all identifying data to ensure participant confidentiality.

Data analysis

Given the lived experience of the participants, analysis was informed by the realist framework,[15] considering how the context and mechanism combines to produce/not produce an outcome. We investigated themes emerging from the discussions using an inductive (emerging from the data) thematic approach. R-AH conducted the interview, with JT, JL and AG present, and R-AH and JL checked the transcripts (which were deidentified), ensuring authors had immersion in the data. Three authors (JT, JL and R-AH) each independently performed preliminary thematic analysis using a spreadsheet and NVivo V.12 (QSR International, Melbourne, Australia) to identify statements supporting emerging themes and the creation of the coding framework diagram. They met to review and perform the final analysis, using a consensus approach to resolve any differences at the end of each stage of analysis.

The study and manuscript were prepared following the Standards for reporting qualitative research.

Patient and public involvement

There was no patient or public involvement in the study.

RESULTS

Consent was received from 11 participants. The majority were female (n=9), with participants made up of practicing GPs from different parts of Victoria, Australia (n=4), representatives from three PHNs (n=4) and other data stakeholders (n=3). All GPs present had used telehealth in their own practice and were representative of both metropolitan and rural settings. Due to the small number of participants in each group, further demographic information will not be made publicly available.
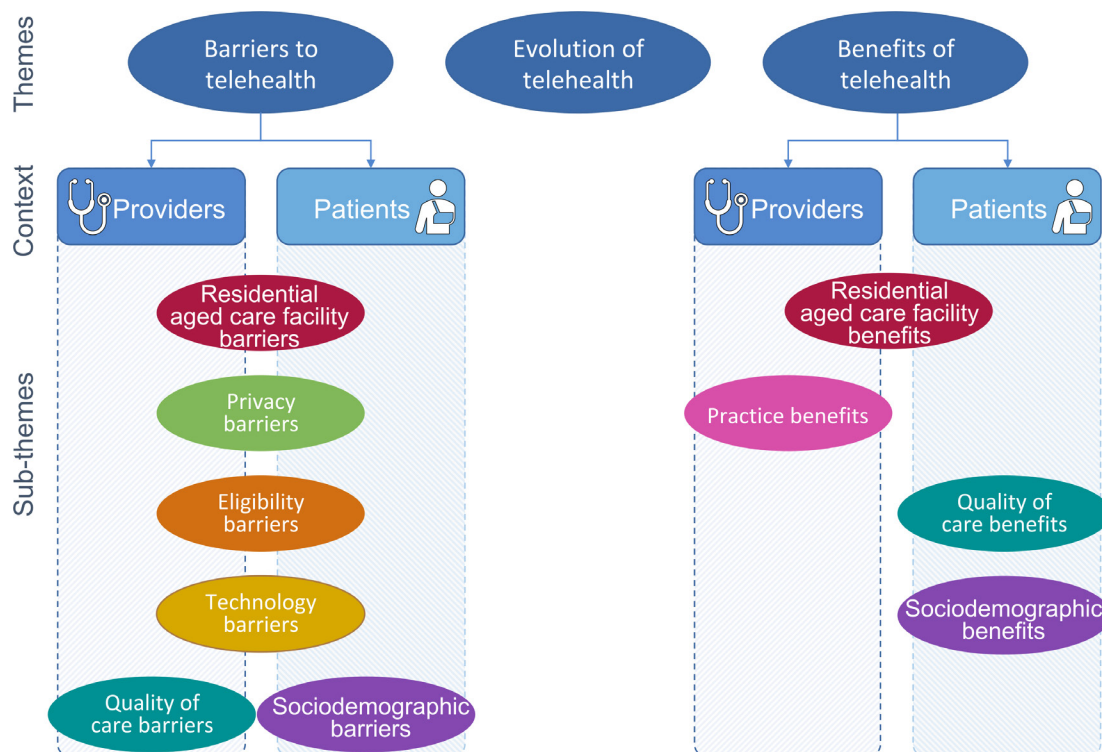
Figure 1 Themes identified during the analysis of the action research focus group.

Overall themes

Three major themes emerged from the data based on the perceptions within general practice: (1) evolution of telehealth, (2) barriers to telehealth and (3) benefits of telehealth. These themes were further broken down into subthemes, categorised by their relevance to providers and patients, as shown in figure 1 and defined in online supplemental table 1, forming a coding framework for analysis.

Major themes and subthemes
Evolution of telehealth

The theme of evolution emerged from the analysis from participants recounting how telehealth has evolved since the prepandemic period. GPs explained that prior to COVID-19, telehealth was a service that allowed patients located rurally or with mobility issues to receive specialist care facilitated by their GP, and the GP or patient was required to travel to a clinical space (either practice or residential aged care facility (RACF)). They also described the impact on care due to changes to MBS policies and billing item numbers since the introduction of telehealth to general practice, such as confusion (for both practices and patients) about the types of consultations that could be billed during the several extensions.

> We didn't have access as GPs to telehealth […] before this pandemic. Only I did it with specialists with my patient and again they would have to drive, come into the clinic and then we'd have to set them up in a room, in a separate room and then you have to coordinate the specialist who was running out, the GP schedule and the patient schedule and the technology. Um,

yeah there were always issues and it was very clunky because trying to get the three- two different doctors' schedules together, and the patient…I mean we used it a lot, well I wouldn't say a lot, but we did use it with specialists but it was, you know, it was always difficult because you were trying to coordinate everything. (P4)

…that's what the government's certainly covered with the new item number after withdrawing you know longer consults from us via telehealth which caused complete mayhem (P1)

"And it was: we had to be there with the patient and it was a telehealth appointment with a specialist; so it was a very different use of a service. […] I think rural was just because of distance you could actually do more with public hospitals; they were a nightmare to do, the technology never worked and, and I think I did –[…] about a maximum of five […] and so we traveled to the aged care facility and sat there with the patient and then connected with the specialist so it was good in the point that you know very frail people didn't have to go and have a face-to-face appointment about a skin lesion first before we could book them directly into have a- you know an excision so it did assist with that, but it was a very clunky—so there was no telehealth that we could do without actually being there with the patient and physically being there during the consult." (P1)

Barriers to telehealth

Participants described their perceived barriers and difficulties in using telehealth, as well as describing

potential barriers that could impact patient telehealth use or uptake. Several subthemes emerged:

Residential aged care
GPs described barriers specific to telehealth consultations within RACFs. These included issues with billing rules, which state that patients must be seen directly, which posed a challenge when a nurse often had to facilitate a telehealth call.

> …billing is a problem. So unless you speak to the patient directly or if you video the patient directly, you can't bill Medicare. And sometimes during that process and having a nurse carrying a phone around or a computer around, following infection control protocols these days is impactful and I wonder whether that's another barrier as well. (P2)

Other factors included the preferred mode of consult for both patients and RACF staff, as well as the need to have notes transferred from the GP to the RACF's software, which may not be accessible by GPs offsite.

> I've got a lot in aged care that are very competent to do that, but it still does then involve a follow up call to the facility. So whatever we do still needs to be interpreted and passed on and certainly the notes need to be written in the facility's software, so that sort of takes longer because there's all these sort of multiple steps. A lot of it is phone; certainly when I'm speaking to residents because that's their preferred way. And then, if there is something I need to see I'll often then get the nurse to take a device to the room (P1)

Privacy
GPs identified privacy risks resulting in hesitancy to use their own electronic devices for consultations, such as the fear of their private contact information being revealed. This highlighted a shortage of technical equipment supplied by practices to facilitate telehealth consultations. The issue of patients declining video consultations was also discussed, with GPs expressing that patients had voiced concerns about being seen on screen, potentially due to lack of privacy to take a video call.

> A lot of GPs are using their own iPhones, you know and doing Facetime and stuff like that, or doing their own Zoom so all of these sorts of external things are using our own devices, rather than equipment. And that's the tricky bit as well about making sure that people don't get access to your private numbers and details. (P1)

Eligibility
In Australia, the MBS sets rules around how and when telehealth may be used, and for the billing item numbers that GPs may claim,[1] both of which have been modified several times since their initial release in early 2020. These ever-changing rules have created confusion among GPs and patients. Participants mentioned that receptionists often acted as gatekeepers, needing to screen patients for eligibility and staying abreast of rules not necessarily evident in online booking systems.

> …if you're a new patient you can't go to any GP and ask for telehealth – you have to have an established GP who you've seen in the last 12 months. And if you look at MBS criteria for new patients for telehealth there's about 10 different criteria that they have to either fit and it's impossible to screen people through these criteria and our receptionists are doing an amazing process of going through all of that because it's very hard, particularly a new patient to be booked in via an online platform because of these Medicare rules saying that you can't just use telehealth unless you're an established- so, unless you are seeing your own GP or any GP from the practice you've consulted with in the last 12 months (P2)

Technology (General)
Both GPs and PHN stakeholders spoke about their concerns around technology barriers, with factors cited including poor infrastructure, time constraints (tasks taking longer to complete), digital competency of patients and lack of consistency in the types of technology used within and between practices.

> …the barrier is the equipment that we have so, often GPs will move from room to room or practice to practice, you know it's not the same nice environment that can have it all set up and in different buildings, the WiFi will work in different ways, certainly ours doesn't work well at all where I generally sit. A lot of GPs are using their own iPhones, you know and doing facetime and stuff like that, or doing their own zoom so all of these sorts of external things are using our own devices, rather than equipment. (P1)

Technology (video)
Stakeholders agreed that numerous barriers impacted the uptake of video as a viable telehealth consultation mode in its current format. GPs were concerned that with the resources available, video calls were time consuming and had a higher chance of failing compared with telephone consults.

> …especially with our equipment at work, it takes so much longer to do a video telehealth. And often they fail in one way or another; whether it's our end or their [the patient] end, and we have to revert to telephone anyway, so it's so frustrating. (P1)

Other concerns included that video software wasn't well integrated into patient management software, which has potential workflow impacts, and that video equipment shortages due to budget or supply issues prevented practices from utilising video telehealth to a greater extent.

The other clinic I have [name of software], a separate standalone software and then I have another separate standalone software for video calls. That's an added barrier for me and for the patient as well. So ideally if you have a system where video and telephone consults are locked into one single software, that's much more useful (P2)

…probably cost as well. So [P1] talking about some GPs using their own phones; and so, some people don't want to do that, some people expect if I work for this practice, this practice should be providing equipment and if the practice doesn't see technology as the enabler for better health care, that's a barrier in itself; just the way that different businesses then think about technology. (P6)

There was also discussion around patient hesitancy towards video consultations, with reasons including insecurity and lack of familiarity of communicating via video.

…there's also a lot of people who've just—we offer it to them and they just say no I don't want it, because I don't want to look at you, I don't want you looking at me. You know, everyone on the call here [focus group] is now very used to sitting on Zoom and we feel a lot less self-conscious, but you think back to two years ago, it wasn't a regular thing to be doing. And for a lot of patients, I think they they've got that same…let's call it a, you know it's a fear of being seen via a different medium. (P3)

It was mentioned that patients may not be given the option of selecting a video call even if they prefer it, as online booking systems didn't specify any difference in consultation modes, leaving the decision up to the practice and GP.

…some practices don't actually offer video telehealth at all particular if you're doing an online appointment; there's no selection for it, it says telehealth but it ends up just being telephone. And so, one of the barriers to video, I think, is the fact that it's actually not being offered in some sense through the online. (P6)

Quality of care

GPs discussed scenarios in which the quality of patient care could be compromised during a telehealth consultation. Reasons included the need for a physical examination during acute illness, as well as difficulty in performing other tasks important to the diagnostic pathway such as pathology referrals, which normally require a hard copy for the patient to bring to the pathology collection centre.

From doctors' factors point of view I've got three: the first one is an obvious one, particularly when it comes to acute care—and I personally see a lot of patients on the day with acute issues: examination's going to change management; if they have right sided abdominal pain, it could be appendix, it could be something

else I need to examine them. If they come in with ankle injury, I need to examine them, apply certain rules to find out whether they need an x-ray and do x-ray appropriately otherwise I'll be wasting resources. (P2)

Sociodemographic

Sociodemographic differences were also perceived by GPs to influence a patient's uptake of telehealth. The main factors mentioned were age and language.

…[older persons] really, some of them are brilliant- I've got a 100 year old—you know very tech savvy, I've got lots of 60 year olds: no idea. (P1)

I know some other people have had issues with connecting to telehealth—just two or three-way chat with the interpreter service; I don't even know if that's possible. But definitely [indiscernible] a barrier, but we have a very diverse demographic that comes here… (P4)

Benefits of telehealth

Overall, GPs agreed that most patients could benefit from telehealth consultations, at least under certain circumstances, and that telehealth was especially helpful as a mode of GP consultation during the COVID-19 pandemic restrictions. They also indicated that benefits existed for both practices/providers and patients.

…I think all patients are the best candidates in the right situation so during lockdowns, when there's high risk…. (P1)

I feel that - of my patient cohort—…I feel like everyone's taken up telehealth really well. (P4)

Several subthemes describing specific benefits of telehealth emerged from the data.

Residential aged care

GPs' RACF patients often fell into high-risk categories for COVID-19 complications. GPs described the advantages of telehealth in this setting, which was prone to outbreaks. Most significant was the reduction in infection risk for both residents and GPs. Another advantage was greater access to RACF-based patients during the GP's normal in-clinic workday, as the time normally spent commuting to the RACF could be spared for clinical activities instead. This was especially helpful for those facilities that allowed GPs to access their electronic systems and that had staff available to help facilitate telehealth calls.

I don't want to walk into an aged care facility and bring it [COVID-19] in and they don't want me to come in, so the more that we can do by telehealth lowers their risk, and that includes things that need face to face, so you know they send me lots of wound photos; they send me lots of stuff that we can do. A lot of them have electronic drug charts now, so I can do everything externally; I have access to their notes

externally so I don't have to go in. And the ones that don't have electronic drug charts they copy the drug chart when it needs redone, they leave it at the front desk; I'll go and pick it up, I'll do it off site and then I'll come back. So anything that we can do to minimize that contact, and that's what the benefits are: it's decreasing patient risk and increasing access to general practice.' (P1)

I do heaps of aged care. Main reason really, is to try and minimize the risk of bringing infection into the facility. So anything that I can triage, anything that I can do: all the paperwork, stuff that they request including self-administration, including nurse-initiated, including you know care plans, medication reviews. And what's been wonderful is that the facility can call me in-hours when I'm stuck in the clinics doing- you know when I wouldn't have been able to go out before and I can get stuff done, and order—get things organized. So to minimize all that after-hours work and anything I can do to minimize a locum being called for non-essential after-hours stuff is what I'd do. So, they're the main reasons." (P1)

Practice

Benefits to general practices were described, including the ability to triage high-risk patients, while still allowing those patients requiring physical examination or further diagnostic tests to have face-to-face consultations following a telehealth. GPs revealed that informal telehealth had actually sometimes been done previously prior to MBS subsidies, therefore, the new telehealth item numbers allowed GPs to be paid for these consultations.

Now in a pandemic setting when three states are in lockdown as well—again I agree with what [P1] said before - almost all consults, as long as it's not an emergency, can be assessed and managed and triaged by using telehealth; whether it's phone or whether it's video or telephone now aided by a clinical photo sent via email and so on. And then we can invite those people who need an examination, especially if that's going to change the management to come in, in a safer way […] the good thing about telehealth and all those aspects is, we can organize—or we can recognize certain patterns and organize pathology or radiology before they come in as well, so when they come in for a physical examination they already have further tests done as well, so it kind of improves productivity—I think that's what it does from practices' point of view and also from patients' point of view… (P2)

…big advantage of is all the work that we've done for years being unpaid, it's actually now being acknowledged and we're getting some money for it. So, you know, which is significant really. (P1)

Quality of care

GPs flagged benefits to patient quality of care that can be maintained or even improved via telehealth. These included improved compliance for some patients with chronic conditions that require regular monitoring due to ease of access. GPs voiced that telehealth can and should be continued past the current pandemic to form part of regular care, especially for certain types of conditions.

…because I do a lot of chronic complex conditions, there's a lot of reviews and so that's an easy way to review without having to get them to come back in. A lot of people have things that they can check their blood pressure at home; there are things that we do, you know, and set out—or they email me photos or do things like that, so it can still work really well. So my main message to get across is that it should be part of general practice from now on, rather than just in the sorts of, you know, acute severe times. (P1)

Sociodemographic

GPs described certain groups of patients for which telehealth may have advantages over face-to-face consultations, including people at higher risk of COVID-19 due to age or underlying conditions. Benefits were also highlighted for patients living in rural areas due to saving long travel times and transport costs to travel to appointments. It was also mentioned that patients were possibly better able to attend telehealth appointments, without fear of needing to ask for time off work.

…older people, immunocompromised, people who are concerned about walking out the door, a lot of people with significant mental health issues including you know, high anxiety and distress find it easier to do, rather than trying to come out and be seen. (P1)

It suits an absolute wide range of my patients - probably 95% of my patients and I'm working in a rural area where people have to travel. A lot of my patients have to travel 45 minutes, 60 minutes to come into town so it helps them a lot you know, telephoning them. It's so much more convenient for them, and even the cost of petrol—a lot of them complain about the costs associated with travel, not only the time as well. So it's really useful in a rural setting. (P4)

DISCUSSION

This study allowed participants to reflect on their own practice using facets of the Action Research approach[11] to provide context for data-driven findings from the PHNs in which they work.[3 9 14] This study also identified aspects of telehealth requiring further improvement to enhance patient care from a general practice perspective, which as part of the action research process is reflected in an exemplar impact measure for general practice self-evaluation and decision support.[16] Findings from the study will also

be important in informing telehealth's evolution more widely. The Australian Government Department of Health announced in December 2021 that funding for telehealth would continue indefinitely, with a $A106 million investment to support telehealth over the next 4 years.[4] This marks an opportunity for commitment to evidence-based improvements to this valuable tool, for which this study provides strong evidence.

Three major themes emerged from the study, including: evolution of telehealth (context), barriers to telehealth (mechanism) and benefits of telehealth (outcomes). A key mechanism underlying these themes was the integration of telehealth into general practice workflow in Australia, which requires a number of considerations. Many of these are unique to the Australian healthcare system, and include administration tasks, GPs' time being billed by item number (and potential constraints associated with this), and siloed communication between and within organisations, which often have incompatible information technology (IT) systems (eg, general practice, RACFs, specialists, pathology labs).

An Australian study also described aspects of the theme of evolution of telehealth,[5] such as changes in funding and reimbursement and the hope that funding for telehealth would continue into the future. The evolution of telehealth has seen GPs transition from a relatively minor role (in accompanying patients for specialist appointments and facilitating monitoring) to having one-on-one remote interactions with their own patients. While many changes to reimbursement have occurred since MBS item numbers were introduced, the promise of ongoing telehealth funding may result in a more stable, permanent telehealth into the future.

Among the barriers to telehealth, GPs reported obstacles at RACFs, including policy issues such as MBS billing rules and IT issues (lack of integration between RACF and general practice systems). These issues are not only a barrier to GPs using telehealth to its full potential, they also have potential for transcription errors and patient safety concerns. One Australian study found that telehealth practices by GPs in RACFs varied widely,[17] with RACF staff expressing mixed feelings about telehealth, and reporting better experiences with GPs who embraced video consultations over those who used phone or no telehealth at all. Privacy was a concern in our study, with security sharing information highlighted. Some of these issues have been reported internationally as a consequence of the rapid implementation of telehealth and the need to relax laws around privacy,[18] therefore, better adoption of secure platforms (eg, encryption to prevent sharing of personal details) should be considered. Eligibility of patients and types of activities for reimbursement was reported by participants in the context of changing billing rules by the MBS, which may have had the knock-on effect of reluctance to invest in telehealth infrastructure (as a temporary measure) by practices. Lack of funding and resources has also been identified as a barrier in the UK.[19] The extension of telehealth,[4] with many telephone

items removed and a greater emphasis on video items, may result in a greater commitment of funds budgeted by practices to support video infrastructure. Technology barriers were a major reason given by participants for low video uptake, as was predicted early in the pandemic.[20] This mirrors the experiences of GPs[5] and practice nurses[21] in Australian studies. Technology barriers may be overcome with improvements to the video workflow, such as better-integrated software (eg, referrals, scripts or payments), more efficient video setup features, better reimbursement and offering video options for online bookings. Sociodemographic barriers are also a known determinant of health and were taken into consideration in key recommendations for closing the digital divide.[22] The subtheme of quality of care has also been reported in previous studies,[5 21 23 24] which have exposed barriers (short consultations, difficulty providing referrals, lack of or inadequate physical examination[24] while also highlighting the value of the availability of telehealth not as a substitute, but as an additional option to supplement traditional face-to-face care when required.

Participants recounted the benefits of telehealth, with safe and convenient access for both patients and GPs reported as key advantages. This is echoed in Canadian[23] and Australian studies,[21 24] with the caveat that access is often dependent on a patient's confidence using technology. The key benefits to practices included ease of triage, particularly for vulnerable patients or those with respiratory symptoms, and GPs receiving pay for previously non-chargeable activities (eg, telephone calls reporting test results). There were also benefits to quality of care, similar to international studies,[23] including compliance with appointments and follow-up care for patients with chronic conditions. Population-specific benefits, such as accessibility for rural and remote patients, concurs with the findings of other studies[25] (even though most are hospital based) which is why telehealth and internet improvements have long been lobbied for in Australian rural general practice.[26]

A major advantage of our study is that it involves practicing GPs and PHN representatives who work within the populations investigated. Studies involving GP input are often difficult to conduct in Australia, partly due to lack of funding incentives to support general practices to participate in data collection and research (including GPs' involvement and remuneration).[27] In addition, the timing of the study (August 2021) means that GPs have had time to use telehealth for over a year, beyond the typical 'shakedown' period. This also meant capturing GPs who worked during the major waves and lockdown periods in Australia, both prevaccine and postvaccine availability. The novelty of telehealth in general practice, being widely available only since March 2020, gives these results greater impact to be used to improve the current version of telehealth. Finally, using an Action Research approach allows practitioners and PHNs to contribute to research as participants and use their involvement to improve practice.

Limitations included that the study does not capture the patient experience directly, but via the viewpoint of the GP, and small sample size. Our final sample of participants comprised 11 from a potential of 16 identified candidates, and the time commitment required for involvement across multiple stages of the research process might have been a barrier against higher rates of participation. As such, thematic saturation was not assessed nor necessary for the study aim to identify issues (for action research),[28 29] with this strategy supported in the literature.[28 29] Also, the timing of the focus group may not reflect more recent GP experiences due to the ever-changing COVID-19 pandemic and resultant policy challenges (eg, study was held during the Delta wave and in the midst of the initial vaccine administration period, but prior to Omicron).

This study's novelty lies in involving stakeholders in the process of Action Research, which has allowed for deeper insights into the barriers and facilitators of telehealth that have the potential to improve care during and beyond the COVID-19 pandemic. These findings will help inform quality improvement of clinical services and workflows for both GPs and patients, such as referral process for diagnostic testing and integrated systems for video telehealth. These improvements will be essential to ensure that quality of care delivered via telehealth is of a high standard. This type of study also allows for capacity building of clinicians to improve practice, enhancing the relevance of evidence used in translational activities and should be considered in future evaluations of and improvements to technology in general practices.

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