

The qualitative experience of telehealth access and clinical encounters in Australian health care during COVID-19: Implications for policy

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Abstract

Background

Adaptive models of health care delivery, such as telehealth consultations, have rapidly been adopted to ensure ongoing delivery of essential health care services during COVID-19. However there remain gaps in our understanding of how clinicians have adapted to telehealth. This study aims to explore the telehealth experiences of specialists, based at tertiary hospital in the Hunter Region, and General Practitioners (GP) including barriers, enablers and opportunities.

Methods

In-depth interviews explored the telehealth experiences of specialists, based at tertiary hospital in the Hunter Region of Australia, and General Practitioners (GP) including barriers, enablers and opportunities. Data were analyzed using an inductive thematic approach with constant comparison.

Results

Individual interviews were conducted with 10 specialist and 5 GPs. Key themes were identified: (1) Transition to telehealth has been valuable but challenging; (2) Persisting telehealth process barriers need addressing; (3) Establishing when face-to-face consults are essential; (4) Changes in workload pressures and potential for double up; (5) Essential modification of work practices and (6) Exploring what is needed going forward

Discussion

While there is a need to rationalise and optimise health access during a pandemic, we suggest that more needs to be done improve telehealth going forward. Our results have important policy implications. Specifically, there is a specific need to effectively train clinicians to competently utilize and be confident using this telehealth and to educate patients on necessary skills and etiquette.

Introduction

Adaptive models of telehealth, including telehealth consultations, have been rapidly adopted to ensure ongoing delivery of essential health care services during the COVID-19 pandemic(1). *Telehealth is the use of Information and Communication Technology applications to provide health services, expertise and information over distance, geographic, time, social and cultural barriers*(2). The increase in the uptake of telehealth has been unprecedented during COVID-19 and there is wide scope to consider how to integrate telehealth into routine practice going forward.

Telehealth consultations are likely to continue while we live with COVID-19 and the risk of other pandemics. Beyond these emergencies, telehealth may also have a role in providing timely care for people with multiple chronic complex conditions, and people in hard to reach communities(3). Changing

to a telehealth delivery mode requires clinicians to navigate a different environment to attend to clinical tasks. Telehealth consults necessitate a greater emphasis on communication and skilled information exchange to engage, activate and facilitate patient self-management effectively(4). Known challenges to the uptake of telehealth have included changes to professional roles, work flow and relationships(5, 6). Additional barriers to telehealth include assessing a patient's needs, technical/legal issues related to sharing protected health information, equipment limitations, and integrating telehealth into existing health care processes(7). Clinical concern stems from evidence that a lack of confidence in telehealth and associated technology creates a barrier to its effective use among home health nurses(8), physicians(9) and counselors(10). Further, the diversity of platforms and providers has led to documented inconsistencies in the care(11).

This study aimed to explore the telehealth experiences of specialists, based at a tertiary hospital in the Hunter Region, and General Practitioners (GP) including barriers, enablers and opportunities. Such understanding is critical if we are to improve and sustain service delivery to patients using telehealth, translating telehealth into a broader system of care with the methods and tools required to support them.

Methods

This qualitative study employed the use of semi-structured interviews and was informed by the Consolidated criteria for reporting qualitative research (COREQ) checklist(12). Recruitment was open to Hunter New England Local Health District specialists based at the John Hunter Hospital, John Hunter Children's Hospital and General Practitioners (GP). Potential participants were invited to participate by response to an e-mail distributed by their Head of Departments including detailed study information. All participants provided written informed consent. Recruitment occurred between August and November 2020. Approval for this project was obtained from the Hunter New England Health Human Research Ethics Committee (2020/ETH01732).

Data Collection

Semi-structured interviews (specialist n= 10, GPs n=5) were conducted by a single interviewer (JW) using an interview schedule(13). Interviews began by asking participants to share their 'story' of transition to telehealth and subsequent questions explored their perceptions of benefits, barriers and opportunities (see Table 1). The semi-structured nature permitted flexibility for participants to elaborate upon or cover important topics that would not have otherwise surfaced(14). Identified themes informed continuing data collection and sampling continued until thematic saturation (two co-coders agreeing that no new themes were emerging) was achieved.

Data Analysis

Semi-structured interviews, ranging from 30-60 minutes, were recorded with the participant's permission and transcribed verbatim with identifying data removed. Two authors (JW, JB), one an occupational therapist and the other a gerontologist, coded data using an inductive thematic approach(15). Data

analysis was guided by an inductive thematic approach (15) whereby the first step involved sustained engagement with the data through an initial reading and re-reading of transcripts to identify units of meaning and initial codes. Following team discussion initial codes were used to identify key categories and the primary author merged codes. In the final step, emerging categories were refined and grouped together into a theme. Rigour was increased through immersion in data, reflexive analysis, peer debriefing and consensus coding between team members and discussion with a broader team(16-18). Coders captured exemplar quotes supporting each theme.

Results

Clinician demographics are outlined in Table 1. Ten specialists including geriatricians, interventional cardiologists, general physicians, neurologists, endocrinologists, paediatric specialists and five GPs participated in this study. Limited participant characteristics are given to protect anonymity.

This program of research identified key findings across six areas:

- i. Transition to telehealth has been valuable but challenging
- ii. Persisting telehealth process barriers need addressing
- iii. Establishing when face-to-face consults are essential
- iv. Changes in workload pressures and potential for double up
- v. Essential modification of work practices
- vi. Exploring what is needed going forward

1. Transition to telehealth has been valuable but challenging

The experience of transition to telehealth was variable among participants. Being a tertiary referral hospital, many specialists already provided telehealth services to designated rural and remote local government areas. Likewise, GPs reported that telehealth, “Is something that we have always done... [we were] just never reimbursed for it. There has always been calls at the end of the day, conversations discussing results, follow-ups that aren’t face-to-face but are urgent. You know, there is a role for those.” (Participant (P), 13, GP)

However, many participants reported feelings of “heightened anxiety” (P4) when trying to monitor and implement “constantly changing” (P10, GP) government directives in response to COVID-19. Specific challenges related to reading and responding to large amounts of communication received from the work place and government about required work practise changes.

“Right from the beginning.....multiple, multiple emails and sort of communications about what should and shouldn’t happen, protocols to become up to date with, exposures to new terminology.” (P2, Specialist (S))

For most participants the transition to telehealth reportedly happened “overnight” (P4, S) and with limited forewarning which meant that essential processes and infrastructure were not in place. Participants reported a lack of access to essential equipment including phones with a speaker option, computers with video capacity or multiple screens, and adequate outgoing phone lines. In many case participants ended up buy and using their own equipment.

Most participants experimented with different modes of communication during the transition to telehealth. Over time, most participants opted to conduct phone consults as video conferencing modes were considered unreliable and required extraneous time to set-up, and often failed which often led to swapping to the phone.

“Me and my colleagues did experiment with using some of the video formats, but ...so much time was lost trying to get things to operate or work. Eventually I think everybody abandoned it [and used the phone]” (P12, GP)

Patient familiarity with different telehealth modes was perceived to vary, irrespective of age. Participants indicated that transition to successful telehealth consults was closely linked with patient’s familiarity with and access to the various modes of telecommunication using video features.

“Most of our patients don’t have mobile phones or are confident managing of them...or a lot of them don’t have somebody that can help them to set it up.” (P2, S)

“What has astonished me is how really poor the tech savvy [aware] people are [with telehealth]even 19- and 20-year-olds.” (P8, S)

2. Persisting telehealth process barriers need addressing

Numerous factors were identified as barriers towards engaging with telehealth. Most notable was the significant time required for staff, typically administrative staff, to schedule appointments in both hospitals and GP practices. This required knowledge of the modes of telehealth that patients had access to, as well as the correct patients contact details to enable login. Participants often spent extra time assisting people to access programs and problem solve telehealth access issues.

“One of the main constraints is technology... the patient needs to be primed and that person may or may not have the ability to prime themselves to get on [telehealth]. It takes about 10 minutes for us to get the person prepared and 10 minutes is a long time for us to waste on and in a busy clinic, when you have 30 patients coming, a lot of people are waiting. We are running late by an hour and a half, I then have to invest 10 minutes of my time to get this person prepared. It was very unsatisfactory re coordination aspects.” (P15, S)

The initial nature of the booking system was ad hoc and, “Not clearly defined” (P5, S) reportedly leading to errors and confusion. Scheduling of appointments and dealing with a virtual waiting room was confusing and problematic for both participants and patients and the absence of a system to keep

patients updated towards their appointment meant that often patients weren't available at the negotiated time, especially if participants were running late or early.

Internet connection issues were common to participants and patients which had the potential to create significant delays. Overall patients were more likely to lack enough data or bandwidth. There was a perceived reliance on family or carers to facilitate a consult and help provide data which was considered less than ideal and likely to create additional, financial burdens. However, government directives often meant, "Family members weren't there [to help], as they would have been normally" (P1, S).

"A lot of [older] people don't have internet, so we have to access it from the son or daughter's phone. I am not sure whether they were wanting to do that - just thinking how much data you can use in a 45-minute consultation. I am not sure whether family members would have wanted to use all their data in that way." (P1, S)

Telehealth procedures and etiquette

In contrast to the commitment and preparation required from patients to attend a face-to-face appointment, participants expressed frustration that patients appeared to place less value on a telehealth consult.

"Yeah, it is such a waste of time, you know. You have opened the notes, you have read the notes, now you want to deal with the problem. If they are not there and you ring back two hours later, you then have to reopen the notes, refresh your mind with that patient. Yeah that was a really big challenge and also, I just feel like people probably do not value it all that much, I do not think our patients value it all that much." (P10, GP)

While several clinics had existing or had developed processes/education to help patients set up and engage with a telehealth appointment, patient commitment towards preparing for a telehealth consult (e.g. downloading skype or zoom, ensuring a quiet room with few distractions) was considered variable. Likewise, many patients didn't come prepared for their telehealth appointment by obtaining essential pathology or scans before a scheduled consult. This not only has created significant delays and double-up when appointments needed to be rescheduled, but also placed patients at risk when areas of concerns weren't investigated in a timely manner.

"I have had a lot of people not attending their blood tests or not attending their ultrasound scans or their surveillance colonoscopy. So, there certainly has been delay in some things, I haven't had a sinister outcome from that yet... touch wood." (P13, GP)

"[A lot of patient have] nothing prepared for this consultation. So, I wasted all my time and effort, no decisions could be made on that day....I am actually quite disappointed that there is not a system of coordination before a telehealth happens, someone needs to tell them what the expectation of the doctor is." (P15, S)

Similarly, many patients, "Would not pick up the phone" (P11, GP) at the scheduled time which required participants to make multiple calls. Alternatively, patients expected participants to call when it suited them.

"[Patients may say] I have just come out of shower can you wait for five minutes. That is completely unacceptable. I mean we are wasting our precious time" (P15, S)

Many patients also attempted to participate in a consult when distractions, that were previously minimised during a face to face consult, were present. Distractions were wide ranging such as when children were present at home or in a car, or when in a busy/noisy environment such as a shopping centre. In these scenarios clinicians often terminated and rescheduled the appointment, especially when issues concerning confidentiality were evident.

"I had a consultation with someone who was in the middle of a paddock and you know we have had conversations with people that were shopping.... we are not going to have this conversation, this is you know confidential stuff." (P8, GP)

3. Establishing when face-to-face consults are essential

Assessment accuracy

All participants preferred to see new and complex clients face to face due to the imperative in obtaining a clear history, undertake physical examinations and establishing rapport. Participant confidence towards dealing with an incomplete picture varied such that some experienced greater anxiety. Most participants arranged for a patient to come in for an in person consult if there were any concerns, however the waiting list was often more prolonged for specialists.

"It [incomplete assessment] gave me a lower threshold to bring them in [for an in person consult." (P10, GP)

For some, concern stemmed from putting interim measures in place or delaying treatment until a patient could be seen in person.

"You may decide not to embark on treatment straightway- to see how they went. Whereas if you had seen them in person, you would likely start a treatment more immediately." (P1, S)

Participants also expressed concern that patients were minimising their issues over telehealth consults which was often linked to them not wanting to be a burden during a challenging time.

"I do think a number of people minimise their symptoms because they didn't really want to bother me". (P6)

High risk patients

Some participants expressed concern at the potential to miss aspects of an assessment since the telehealth relied on patient self-report of symptoms rather than observation.

“Yes, very early on I missed a cerebellar stroke so that was a bit unpleasant for me. You just do not pick up from those cues of seeing them in the waiting room, standing up, walking in, where you get [visual information].....The consultation starts in the waiting room, so you are missing out on that completely [in a telehealth consult].” (P10, GP)

Observation and physical assessment were integral to a consult such as: noting social aspects, unusual neurological presentations (eye movements) and movement disorders, sensation and movements that made patients at risk of falls, insulin injection sites, joints (rheumatology), and allergies.

“I am fearful that I may have missed things that could be important...for example I was talking to a woman, and by the end of the consultation the penny dropped that she was morbidly obese [which impacted clinical advice]. But nowhere on the GP referral or within her conversation or conversation with her husband had that been described.” (P1, S)

Face to face communication was also deemed more beneficial when treating people who were deaf, brain injured or cognitively impaired. Similarly, the opportunity to reinforce the imperative for behaviour change in chronic disease management was also made difficult in a telehealth consult.

“If really want to reinforce exercise, diet, alcohol, not smoking, that kind of thing if you really want to motivate the patient to make some change. Get them in.” (P12, GP)

Several critical care scenarios were noted where not being able to see someone face to face had the potential for overlooking patients at risk, particularly children and the elderly.

“I gauge a lot from seeing the patient’s face and seeing how they move I mean it’s just simple things like looking at their skin or their feet, the condition of their feet. You can tell a lot about how somebody is being cared for you know...things like vulnerability [to abuse].” (P2, S)

Specifically, there was a need to assess patients at risk of abuse and be able to create a separate time and space where the patient and family could be spoken to separately.

“Concerns around the patient’s vulnerability in the setting of family disharmony, a lot of tension in the household and things. Normally I would separate the patient from the family members with my community intervention nurse separately and see them separately and so we could sort of gauge some aspects of the consultation in private.” (P2, S)

Adequately dealing with abused patients and patients with mental health issues reportedly required a close therapeutic relationship and the time/opportunity to adequately deal with any emergent distress. All participants acknowledged the difficulty of detecting patient distress and providing support over telehealth and addressing issues that may be a barrier to their health care.

“So, they often get quite distressed and you need to be able to manage that safely because normally if they are going to transition from the clinic room through the corridors and social environments back to the car, etc.... that allows a bit of processing. But if they go to their lounge room with no transition at all they can end up going back to crying for a long time if you haven’t helped them kind of resolve their emotion in the session.” (P7, S)

“Sometimes I hear silence, I don’t know this person is upset until I hear them crying. But if they come to me, I can make out very easily this person is getting upset, anxious, then we can really get into the issues that has prevented them from engaging in a proactive healthcare, it may be distress regarding the diagnosis, it may be denial about their condition, so unless we address those aspects properly, you do not actually make a clinical outcome better.” (P15, S)

Therapeutic relationship

Developing a therapeutic relationship over telehealth was problematic and a key barrier reported by all participants, although not insurmountable. Telehealth, even with video capacity, made it difficult or delayed the ability to engage with a patient, read body language, respond to communication cues, and engage in conversations that allowed for a relationship to develop as well elicit helpful, supporting informative e.g. regarding socialisation.

“Well a telehealth consult is really a conversation to try and get out what it is you need to know. One of the problems is you cannot read body cues- you have got to be quite concise in what you ask because it is not easy to interrupt. Whereas in an interview there are other cues that will allow them to know that you are ready to ask another question or perhaps to ask something more on than subject. You cannot easily do that on phone.” (P6, S)

Participant also felt that patients were more likely to provide additional, valuable information during an in person consult, often when talking informally. Many GPs perceived patients, “Feel more at ease to bring up other complaints they might not have thought were a big deal and sometimes they are not. But other times, you know, it might be something that concerns us more than the patient. Mental health is a big one as well. There are a lot of times where people will come in face-to-face for a script or some other condition and then you end up having a good chat about their mental health. I would not get that over the phone at all.” (P11, GP)

4. Changes in workload pressures and potential for double up

Telehealth was a reportedly a time-consuming process. For administrative staff extra time was needed to set up appointments, problem solve patient access issues or rebook appointments. Participant indicated that while telehealth appointments were shorter in length, it was common to spend additional time pre and post a consult. For example, a significant amount of time was spent compensating for a lack of information thus requiring time to review reports and referrals prior to a consult. Similarly, additional work was often required such as writing lengthy letters to GPs to ensure adequate follow-up and outline any

assessment omissions, ordering/faxing tests and scripts, and emailing or phoning GPs or other staff with instructions or for verification etc

“I finish a consultation and I am definitely not as confident as I would be when I am assessing face-to-face, but I guess I make it clear in my communications it is a limited assessment in some respects.” (P2, S)

“That is a disappointing aspect of this whole coordination of telehealth that we have to ring the pharmacy, we have to ring the GP practice, we have to ring the pathology, we have to then send the scripts to this place, ring and tell them that the fax is coming.” (P15, GP)

Shorter consults that weren't face to face also had the potential for errors if concentration was lost during a busy clinic, especially when trying to take in information from various modalities.

“It is far easier to make a mistake on telephone conversation, because the information that is coming is far less. So, I think telephone consultations are pretty hopeless. For instance, once I got the medications wrong. I must have been concentrating on something else. And they are much quicker... telephone conversations are like a quarter or the time.” (P3, S)

“We might also make mistake. I have seen that sometimes you call the wrong person and you go through the consultation and then you realise you are in the wrong folder.” (P15, S)

Overall many felt that telehealth resulted in a double up of their time and efforts.

“I need to see this guy, it has been two appointments I have seen him on a telephone basis. I really do not know what is happening. I need to bring him back and see him. It does create extra work.” (P5, S)

5. Essential modification of work practices

All clinicians readily modified their work practise and communication style through trial and error in response to adopting a telehealth practise. For some this meant modifying standardised assessments for use over the phone such as abbreviating the MMSE (cognitive assessment) to obtain some semblance of a cognitive screen since, “There aren't many validated tools for cognitive assessment over the phone” (P2, S). Other strategies reportedly included asking more detailed questions to try and elicit correct information and compensate for a lack of visual cues or relying on family and carers for clarification.

“I ask them specific questions: what happened about your blood sugars, what happened with your blood tests. I am looking for answers. We need to have clear questions, as not all patients have clear questions to give clear answers. We should try to explore their questions and their concerns.” (P5, S)

One clinician with extensive experience with telehealth reportedly increased the number of pauses to allow a patient to speak since the nature of telehealth often meant people spoke over the top of each other.

"[Face to face] I can pick up on subtleties in body language and I can see or hear [a patient trying to speak] and I know now it is my turn to stop talking.... I stop talking a lot earlier [during telehealth] than I would normally stop talking and check if you have got anything that you want to say." (P8, S)

Participants spent additional time seeking verification from patients such as encouraging patients to write things down or asking them to repeat what had been said.

"When I think I am not sure if my patient is able to understand exactly what I am saying, then I ask them to please, get a pen and paper, and write this down." (P4, S)

6. Exploring what is needed going forward

All clinicians reported that telehealth was inferior to face to face consults but had a role going forward. Telehealth was considered most appropriate for patients where there was an existing therapeutic relationship, and for, "Follow-up things or for things where it is a very easy diagnosis you know." (P8, S). Participants greatly appreciated being remunerated for time spent on the phone providing follow-up, confirming an ongoing treatment plan or writing scripts. Likewise, there was a perceived benefit for an initial consult where bloods and scans etc were requested prior to further assessments or prior to a well define procedure. These had a mutual benefit for patients in not requiring them to travel, wait for long periods and pay for parking. Specific benefits were noted for children at risk of missing a day of school at a time, significantly disable patients were transport was difficult and older people who had the potential to experience fatigue and confusion.

"We are trying to keep kids in school, so if they have to have a day off to travel, that's a problem. If we can telehealth to a computer at school, then that is better." (P8, S)

Some participants felt that patient could be triaged ahead of time where could be determined if it was essential, they attend in person or not.

"I now this month I have been triaging, we get about 30 to 40 reference a week in diabetes, I can easily say which one needs to come definitely and which one does not need to come, we can triage it and then that is not the problem." (P15, S)

However, participants emphasised that if increase telehealth services were expected then more infrastructure was need regarding equipment and staffing.

"We are just expected to absorb it. That is the difficult part if you expand telehealth because telehealth can go anywhere, but at this end somebody needs to enhance us, and we have not had any enhancement." (P15, S)

Telehealth also provided the scope to provide continuity of care by streamlining services in aged facilities, supporting palliative care and other complex care and social issues, such as busy mums.

“I think the mum was anxious, there was nothing wrong with the baby. But for her it was really good doing a video call, just reassure. Reassure is part of follow-up anyway.” (P10, GP)

However, the option to schedule “blocks” of telehealth was highly valued due to the nature of telehealth fatigue e.g. extra concentration, anticipating problems

“It is the constancy of, you know, the next time that you contact someone, are they going to be there, what technical issues ...I am trying to describe something to someone you know or have a lot of images to show them. [When they are face to face] it is easy to show them images.” (P8, S)

Discussion

As with other countries, telehealth has enabled Australians to stay connected with the health care system during COVID-19. Participants reports highlighted that the use of telehealth increased dramatically.

Consistent internationally, conveniences were noted towards maintaining health access for patients and reducing the burden of travel and waiting times(19). Likewise, participants were reimbursed for essential work they were already conducting over the phone(20). Echoing previous research, this study identified limitations of telehealth which resulted in the delivery of care where participants experienced challenges with booking processes and internet connection, and poor patient computer literacy(21, 22). These may be magnified in patients from low socio-economic and culturally and linguistic diverse backgrounds(23, 24). Overall participants were required to accommodate for a deficient clinical history, struggled to establish a therapeutic relationship, and spent time extra post consult to follow up referrals and scripts.

Communication barriers due to the lack of non-verbal communication and information exchange in telehealth have been well established (25). Evidence shows that up to 55% of the impact of consultation is attributed to visual and non-verbal communication(26). In addition evidence shows that patients frequently misunderstand health information given by phone(27). Poor health literacy is exacerbated in people with mental health issues(28) and sensory conditions such as altered vision and hearing(29). A key finding of this study was that participants self-initiated modification of work practice to ameliorate for potential communication deficits, such as more detailed questioning and seeking verification. However, clinicians accepted that clinical care given to patients using telehealth was different, and often delayed, in comparison to care given face to face. While telehealth competencies exist in the provision of telehealth across various professional groups(30), few clinicians are formally trained to deliver their professional services using telehealth(31). Consistent with growing evidence we posit that the effective use of telehealth requires appropriate education of patients and clinicians about the safe and effective use of telehealth for the provision of high-quality patient-centred healthcare(32-34).

Previous research has demonstrated that patients are often satisfied with telehealth, the quality of care and convenience(35, 36). A recent systematic identified barriers and facilitators to telemedicine(37) with key barriers including access to and quality of technology, lack of seriousness, difficulty expressing difficult emotions, poor body language and communication and scheduling conflicts.(37). However, results from our study suggest there was a perceived the lack of respect for and preparation towards a

telehealth consult among patients which led to unnecessary duplication of consults and delayed assessment. Indeed, previous research suggest that people from either rural areas, low literacy, low socio economic status or from cultural and linguistically diverse backgrounds find telehealth the least accessible and may benefit from education(38).

All participants acknowledged that a telehealth appointment was better than no appointment at all. However, going forward telehealth services were deemed to require improved software which promoted booking efficiency, data security, and data transfer. With greater expectations to see people who lived in closer proximity was a need for more staffing and infrastructure to support this. As supported by a recent systematic review of the role of telehealth during COVID-19 , improved administrative processes, such as having a triage system would allow for more accurate identification of people who needed to be seen person(39).

Strengths and Limitations

While our approach provided the opportunity to obtain diverse perspectives on what current and future telehealth services should look like, the use of purposive sample may have resulted in an invested sample. Likewise, our sample was small and selected from a single urban location. We did also not capture the patient perspective. Future research should explore the patient perspective including people from cultural and linguistically diverse populations. In addition, research should be prioritized to ensure the consistent quality of telehealth consultation.

Discussion

With unprecedented increase uptake of telehealth, there is an opportunity to integrate telehealth into routine practice, potentially improving inequities and inefficiencies in the delivery of care for patients. Our results suggest several policy areas for attention to support telehealth, including the need for further investment in information technology infrastructure across health services. Likewise there is a need for administrative support to facilitate changes in practice and workflow and appropriate clinical and patient training to promote establish evidence-based, patient-centred and sustainable telehealth care.

Declarations

Ethics approval and consent to participate

This project received approval from Hunter New England Health Human Research Ethics Committee (2020/ETH01732). All participants written informed consent.

Consent for publication

Not applicable.

Availability of data and materials

The qualitative data used and/or analysed during the current study are available from the corresponding author on reasonable request.

Competing interests

The authors declare that they have no competing interests.

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Authors' contributions

JW completed data analysis with support from JB and TW. JW drafted the manuscript for publication and JB and TW contributed to the content and revision of the manuscript. JW managed revisions, literature and checking of the manuscript. All authors read and approved the final version.

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Tables

Table 1: Question Guide

Question	Prompt
Can you please start by providing a brief overview of your current position and how the pandemic as impacted you?	<p>At what stage did you introduce telehealth?</p> <p>What was needed to establish a telehealth service?</p>
What has been your experience of telehealth during COVID-19?	<p>What types of clinical encounters have you provided through telehealth? Why? Why not?</p> <p>Did you change anything about your consult?</p> <p>Any other changes other than telehealth uptake?</p> <p>Did telehealth work as you hoped?</p>
What clinical interactions do you think cannot be effectively conducted through telehealth	<p>How did you manage these during COVID-19?</p> <p>Any patients postponed?</p>
How did the telehealth consult compare to usual care?	<p>Communication?</p> <p>Verification without hands on assessment?</p> <p>How did you think patients received your consult?</p> <p>How did you manage patients with complex needs?</p> <p>What did you learn/change over time as you provided consults over telehealth?</p> <p>Any team consults?</p>
Have you previously used telehealth?	<p>Expand</p> <p>Do you feel confident using telehealth?</p> <p>What would help you?</p> <p>How did you test patient retention and understanding, if at all?</p> <p>Do you think you would benefit from additional training?</p>
Did you encounter any adverse events?	<p>Please expand? How did you manage this?</p>

What do you feel are benefits of telehealth?	Expand?
Do you think there is potential and value in extending telehealth beyond the Covid-19 period.	Expand? What is needed? Any complementary services required? Complex care and team?
Do you have any further comments	