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# **Understanding experiences of telehealth care delivery for hepatitis C treatment in Australia:**

Findings and recommendations  
from a national qualitative study



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# Executive summary

**This report presents research findings from a qualitative study investigating experiences of telehealth from the perspective of patients and healthcare practitioners during the COVID-19 pandemic.**

## Hepatitis C in Australia

Direct-acting antiretroviral (DAA) medications have revolutionised treatment for hepatitis C, with fewer side effects and higher success rates. In the context of Australia's commitment to the World Health Organization's goal of elimination by 2030, Australia is seeking ways to improve access and treatment uptake. Since the beginning of the COVID-19 pandemic, telehealth has helped facilitate access to essential primary health services beyond its existing use in regional and rural settings. **In this context, more needs to be understood about the barriers to accessing telehealth for people living with hepatitis C, including issues relating to engagement and retention, and the support needs of healthcare practitioners.**

## About the current study

These findings are from a qualitative study based on semi-structured interviews with 40 healthcare practitioners and patients, and a comprehensive literature review of peer-reviewed publications on telehealth for hepatitis C in Australia, Canada and the United Kingdom. Recruitment for patient interviews was conducted through sector venues such as needle exchange programs and community health organisations, as well as through relevant healthcare practitioners; while healthcare practitioners were directly contacted or recruited through word of mouth. Interviews were conducted over the phone or via videoconferencing. They explored the impact of COVID-19 on everyday and professional life, experiences of providing or receiving treatment and care over telehealth, and issues around access, stigma, and the practitioner-patient relationship.

## Findings

As noted above, this study explored experiences of telehealth for two groups: patients and healthcare practitioners. While the two groups shared a number of perspectives and concerns, they also raised issues and priorities unique to their needs and roles. These are summarised below.

The first group analysed were patients. Findings from this group indicate that experiences of the COVID-19 pandemic and related restrictions included changes in housing, employment, and mobility. Several participants experienced social isolation and poorer mental health during this period, and some were subject to increased stigmatising and discriminatory encounters with police. Some described managing these changes through heavier alcohol and other drug consumption. While access to necessary healthcare was affected for some, the government changes to the Medicare Benefits Schedule (MBS) during the pandemic made telehealth available to many participants, often for the first time. Those whose care was changed to a telehealth model were understanding, and many found it convenient. However, messaging about the availability of telehealth could have been better; many found out by chance that such services existed.

Patient participants were mostly positive about their experiences of treatment by phone or video telehealth. Some appointments were scheduled, while others were unscheduled 'check-ins'. While patients said it was possible to have privacy on a telehealth consultation, they also described needing to manage these calls amid other responsibilities and across different settings, such as their homes and workplaces, sometimes resulting in problems with privacy and confidentiality. In this regard, privacy and confidentiality are easier to manage with planned, scheduled appointment and consultation times. Patients found reminders and scheduling of appointments helpful; however, notification of appointment times by mail caused some concern and was not considered convenient by all.

In terms of the limitations of telehealth as perceived by patients, hepatitis C treatment was mostly seen as straightforward enough to be well suited to telehealth. However, more complex healthcare needs were less likely to be met by telehealth, and some participants were concerned about the ability of healthcare practitioners to provide examination or diagnosis where necessary. While some patients were

confident about technology, some had significant concerns about their ability to manage video consultations, and many defaulted to phone, even if they had access to the technology required for video telehealth. Only four participants had any experience of video telehealth. Patients with limited phone reception, and those with uneven access to phones or credit, may have additional challenges accessing telehealth.

Patients found telehealth shaped the quality of the healthcare practitioner-patient relationship. They spoke about relationships being easier to develop and maintain if they were already to some degree established by previous face-to-face interaction, and the data collected for this study suggests that the practitioner-patient relationship needs ongoing attention in a telehealth care model. Telehealth does, however, enable a more proactive or persistent approach to hepatitis C treatment initiation and follow-up. Patients considered check-in appointments useful. Successful relationship building was often characterised by the presence of reassuring interactions and clear communication. Patients expressed a strong need for non-judgemental interactions with healthcare practitioners, and they sometimes found telehealth allowed them to avoid the stigma associated with in-person healthcare.

Overall, the data suggested that patients would benefit from ongoing access to telehealth, with the option of video consultations where possible. Telehealth offered the participants interviewed for this study flexibility and the potential to avoid negative stigmatising experiences in healthcare settings, but some patients would benefit from additional support through a dedicated worker or 'telehealth coordinator' in setting up and/or using videoconferencing.

The second group of participants interviewed for this study were healthcare practitioners, including GPs, nurses, medical specialists and other health workers. Healthcare practitioners noted that COVID-19 limited their access to new patients and, depending on the location of the service, extended stay at

home restrictions and other restrictions resulted in reduced caseloads. Some practitioners took the opportunity to engage in more proactive follow-up with already engaged patients who had not started or finished treatment. However, implementing telehealth was often ad hoc and levels of support varied widely between healthcare organisations. Sometimes changes were led by individual staff out of necessity and entrepreneurship. As well as the use of technology, telehealth often necessitated a change in the administration of healthcare, particularly in terms of prescriptions and pathology, but also recordkeeping and appointments. Postal services were seen as onerous and unreliable during this period and a poor fit with telehealth. Multiple healthcare practitioners described pharmacists' increasing role in providing health information and support to patients, and they also had an increasing role in screening in some cases. Changes in Medicare billing were seen as highly instrumental in either impeding or facilitating access to telehealth, although some practitioners had separate funding and were not dependent on Medicare billing.

Like the patients interviewed for this project, healthcare practitioners found that telehealth affected the practitioner-patient relationship, particularly rapport building, and tended to make appointments briefer and less involved. Practitioners voiced some concerns about privacy and confidentiality in telehealth, and said that telehealth overall may lead them to miss more complex health conditions in the interaction. Video telehealth also presented more significant barriers to access than phone telehealth, as available infrastructure and technology vary across different settings. For these reasons, accessibility should be a key measure in future approaches to telehealth, ensuring that all options remain available so that as many people as possible can access treatment for hepatitis C via the means most effective for them.

## Recommendations

### Enhancing telehealth accessibility and engagement

1. Efforts to improve telehealth accessibility and reduce patient exposure to and experience of stigma should involve peer advocates and harm reduction workers in the design and delivery of models of care and telehealth services.
2. Efforts to help patients engage in telehealth for hepatitis C treatment should be strengthened through additional messaging and health promotion by government and peak sector bodies to advertise its availability and explain its features and processes.
3. Healthcare practitioners working in the hepatitis C sector should consider engaging in clear and informed discussions with people accessing hepatitis C treatment about the availability of telehealth modes of service delivery.

### Ensuring flexible modes of telehealth service delivery and support

4. Healthcare practitioners should schedule and plan follow-up consultations in advance (except where patients specifically agree to, or prefer, spontaneous contact) so they can better manage privacy and confidentiality, and to improve the quality of the telehealth encounter.
5. Healthcare practitioners should consult with patients about their preferred method of communication and avoid using the postal system for reminders, prescriptions and referrals unless absolutely necessary.
6. Where video telehealth is supported, preferred and would be an advantage, organisations should consider offering patients an initial appointment with a specialist worker to support them in setting up and using telehealth videoconferencing.

7. Services that support target patient groups should be funded to set up video telehealth hubs and/or infrastructure for telehealth appointments for existing clients.

### **Optimising the use of telehealth for hepatitis C treatment**

8. A telehealth care model for hepatitis C treatment should be embedded, wherever possible, in pre-existing healthcare relationships to support trust, communication and a positive experience of healthcare for patients.
9. In the absence of a pre-existing relationship between the hepatitis C treatment provider and patient, or an initial face-to-face appointment, MBS telephone items should support longer consultation times to improve patients' comfort, engagement and understanding of treatment.
10. Healthcare services and organisations should oversee and resource the set-up and management of telehealth infrastructure and technologies to avoid placing the burden of change primarily on individual staff members.
11. Given the greater involvement of pharmacists in information provision about hepatitis C treatment and medication regimes, future targeted education activities and hepatitis C training should address and include pharmacists.
12. Further research is required on the effect of telehealth on healthcare practitioner time management and administration, in order to identify potential additional support needs.
13. Organisations should provide training and support to healthcare practitioners delivering hepatitis C treatment and care through phone consultations, to assist them to better respond to and manage non-verbal cues and silences.
14. While videoconference services are the Australian Government's preferred approach for telehealth, and should be used where

appropriate or preferred, use of videoconferencing should not be a requirement for Medicare billing, as this would create an impediment to delivering treatment for hepatitis C.

15. The temporary MBS telehealth items made available to nurse practitioners, GPs and other medical professionals involved in hepatitis C treatment to reduce the risk of community transmission of COVID-19 should be made permanent to enhance access to hepatitis C treatment.

# Background

Treatment for hepatitis C has improved significantly in recent years with the introduction of direct-acting antiretroviral (DAA) medications that have far fewer side effects and much higher success rates than past treatments. Australia has committed to the World Health Organization's goal of elimination by 2030. However, as identified in Australia's Fifth National Hepatitis C Strategy 2018-2022 (Department of Health, 2018), widespread reforms in healthcare delivery are needed to improve access to these medications and treatment uptake if Australia's elimination goal is to be met. Telehealth services are presented as one way to improve access to hepatitis C treatment; however, its usefulness for the treatment and care for hepatitis C is not well understood (Keogh et al., 2016; Schulz et al., 2020).

Research on hepatitis C treatment access identifies a series of issues shaping and often impeding uptake for people who have hepatitis C. These include concern about side effects, housing availability, geographic isolation, criminalisation of people who consume drugs, gaps in continuity of care and the availability of supportive and non-judgemental healthcare (Harris & Rhodes, 2013; Madden et al., 2018). In Australia, telehealth has been successful in improving patient access to hepatitis C treatment, particularly in prison and regional or rural settings (Bradford et al., 2016; Mina et al., 2016). Telehealth has also been understood to address barriers to treatment uptake by reducing the financial, travel and other material costs associated with accessing treatment (Bradford et al., 2016; Schulz et al., 2017), providing access to specialist treatment without requiring patients attend tertiary hospitals (Wade et al., 2016), and by providing access to treatment in settings (e.g. prisons) without specialist clinics (Mina et al., 2016; Neuhaus et al., 2018; Papaluca et al., 2019; Taylor et al., 2018). With stigma and discrimination cited in the national strategy as key barriers for people living with hepatitis C to attending health services, accessing healthcare remotely also has obvious benefits, but as described in more detail below, research on patient experiences of telehealth is limited.

Since the advent of COVID-19, the broader utility of telehealth in facilitating access to essential primary health services has become clear, as more people start to access healthcare in their own homes. Some people living with hepatitis C may be more vulnerable to infection and severe COVID-19-related illness. For example, Bollipo et al. (2020) argue that 'patients with chronic liver disease represent a vulnerable population who are at higher risk of acquiring COVID-19 and suffering from its complications' (p. 1369). To consolidate the opportunities of telehealth that have been enabled during COVID-19, and optimise the use of telehealth where it is effective and valuable, better understanding is needed of barriers to accessing telehealth for people living with hepatitis C. While advocacy organisations have called for increased flexibility during this time (and temporary MBS telehealth items have been created to improve access to telehealth services), nothing is yet known about the perspectives and experiences of people living with hepatitis C or of healthcare providers using telehealth. This report analyses the findings of a targeted and timely qualitative study, the first of its kind in Australia, to investigate experiences of telehealth for patients living with hepatitis C and for healthcare providers.



# Literature review

**Telehealth is generally thought to have been successful in improving patient access to healthcare, especially for those living in regional or remote areas. However, the usefulness of telehealth for the treatment and care of blood-borne viruses (BBVs) and sexually transmissible infections (STIs) has not received much attention from researchers and is not well understood.**

This focussed literature review was conducted to address the following aims:

1. Synthesise the benefits and disadvantages of telehealth for patients receiving care for HIV, hepatitis C and STIs, including a comparison between telephone, video and in-person experiences of quality of care
2. Conduct a focussed analysis of the unique issues relating to telehealth access and delivery for hepatitis C treatment

This literature review provides an overview of key findings and points to issues that require further research and consideration. Aim 1 is addressed in section 1 of the review, which is divided into three parts:

- **1.1.** Benefits of telehealth for patients receiving care for HIV, hepatitis C and STIs
- **1.2** Disadvantages of telehealth for patients receiving care for HIV, hepatitis C and STIs
- **1.3** Comparison between telephone, video and in-person experiences of quality of care

Aim 2 is addressed in section 2:

- **2.** Issues unique to telehealth access and delivery for hepatitis C

## Literature collection method

Literature searches were conducted using the following search parameters and inclusion and exclusion criteria:

- **Database:** Emerald Insight, ProQuest, Scopus, Web of Science
- **Date range:** 2016-2021
- **Language:** English only
- **Region:** Australia, Canada, and the United Kingdom (selected as countries that are economically and culturally comparable with similar policy approaches to healthcare)
- **Keywords:** ("telehealth" OR "telemedicine") AND ("hepatitis C" OR "HIV" OR "sexually transmissible infection" OR "STI" OR "viral hepatitis")

The results were then assessed in three phases. In phase 1 of the search, the search strategy above was used to identify potential publications for inclusion. This resulted in 215 unique results after the removal of duplicate entries. The titles and abstracts of each were then reviewed to identify any suitable for exclusion (phase 2). Publications were excluded if they:

- Did not meet the geographical criteria (69 articles excluded)
- Did not contain information about telehealth for any of the conditions of interest (51 articles excluded)

This process (phase 2) left 78 articles remaining.

Of these articles, publications were then assessed (phase 3) for information relevant to the aims of this literature review, including any material on or discussion of:

- The benefits and disadvantages of telehealth for patients receiving care for HIV, hepatitis C and STIs
- Comparisons between telehealth modalities
- Unique considerations for telehealth access and delivery for hepatitis C

Articles were included if they reported on telehealth service delivery (including phone follow-up) for any of the conditions of interest. While mobile

health (mHealth) interventions such as apps and text-only services are not within the scope of this literature review (five articles excluded), mHealth interventions that include either video or phone follow-up have been included. Following review, 23 articles were found to contain relevant information.

Of the remaining articles, six address STIs, seven address HIV treatment or prevention, and nine address hepatitis C or viral hepatitis generally. An additional article addresses infectious diseases in general terms, including some of the conditions of interest. Largely quantitative, this research does not often capture qualitative experiences of telehealth, or qualitative changes in health or circumstances due to the use of telehealth. Of the 23 articles, four were qualitative in methodology and five used mixed methods, including survey open-text responses. The main themes found in the literature are addressed below in order of the most significant theme to lesser themes.

## 1.1 Benefits of telehealth for patients receiving care for HIV, hepatitis C and STIs

In this first section we address Aim 1 by exploring the benefits associated with the use of telehealth for patients receiving treatment and care for HIV, hepatitis C and STIs. Detailed research on patients' experiences of telehealth for treatment of these conditions is scarce, with publications mainly focussed on healthcare practitioner perspectives, and measuring treatment outcomes or 'patient satisfaction'. Qualitative information about what satisfaction and convenience mean to patients is not collected in these studies (Estcourt et al., 2017; McCulloch et al., 2020), with one exception (Aicken et al., 2018). This means it is often unclear what these terms refer to. Often the convenience of telehealth is quantified through simple survey measures, or the distance of travel saved in a telehealth consultation (Schulz et al., 2020),

and more work needs to be done to understand more broadly what patients value about telehealth. While privacy and confidentiality are also framed as benefits of telehealth, as explored later, they are also seen as problems in telehealth care delivery, suggesting patient experiences are complex and that good telehealth care is likely shaped by the modality of telehealth care.

Given the literature is so limited in scale and scope, it is not possible to definitively outline the benefits of telehealth for patients, but in the following sections we summarise key positive features for patients identified in the available research. These include improved accessibility, convenience and patient satisfaction; increased privacy and confidentiality; efficient and effective treatment and improved healthcare practitioner-patient relationships. Caution should be exercised in interpreting these findings, because subsequent, more extensive, research may identify limits to these results and further issues and concerns.

## Accessibility, convenience and patient satisfaction

A number of quantitative studies ( $n = 7$ ) suggest that telehealth increases access to treatment and medical expertise for patients (Aicken et al., 2018; Anderson et al., 2017; Bardosh et al., 2017; Cooper et al., 2017; Mashru et al., 2017; Rodrigues et al., 2021; Schulz et al., 2020). However, accessibility was largely related to those who live in isolated geographical regions. For example, according to Cooper et al. (2017), who studied telemedicine for hepatitis C, telehealth increases access to direct-acting antiviral medications in 'under-served and remote areas' (p. 874). In studies of hepatitis C treatment, Rodrigues et al. (2021) and Schulz et al. (2020) found that patients saved money and minimised travel. Notably, research on telehealth treatment for hepatitis C and HIV was more likely to emphasise benefits associated with rural and remote access than research on STIs (Beaulac et al., 2019; Rodrigues et al., 2021; Schulz et al., 2020).

Improved access was also understood as including greater access to more

specialised or expert care (Bardosh et al., 2017; Estcourt et al., 2017; Horwood et al., 2020; Keogh et al., 2016; McCulloch et al., 2020). This was especially the case in research on STIs, in that some studies report that patients valued being able to access specialist care and knowledge. For example, users of web-based STI programs were given specialised information and treatment (Estcourt et al., 2017; McCulloch et al., 2020), as well as follow-up care and support. In another study, patients found the information provided on gonorrhoea and chlamydia and their treatment 'comprehensive, reassuring and helpful' (Aicken et al., 2018, p. 242). In a similar telephone-based service for STI treatment (Horwood et al., 2020), patients preferred telehealth with specialist nurses who could answer questions and arrange treatment with their general practitioner. Keogh et al. (2016) and Bardosh et al. (2017, p. 876) also emphasised that a benefit of telehealth was increased access for patients to specialist care for hepatitis C.

The publications analysed also often mentioned the convenience of telehealth for patients ( $n = 8$ ). However, convenience was typically narrowly understood as minimising travel for patients or reducing disruptions to patients' everyday lives and work to attend appointments (Aicken et al., 2018; Jongbloed et al., 2020; Keogh et al., 2016; Rodrigues et al., 2021; Schulz et al., 2020). In some papers, the convenience of telehealth was taken for granted rather than evidenced (Day et al., 2020; Keogh et al., 2016); while in others, understandings and experiences of 'convenience' were said to be shaped by telehealth modality (Marent et al., 2021), with telephone seen as more convenient (explored further below in section 1.3).

Six articles mentioned the related concept of patient satisfaction as a measure of successful telehealth treatment (Aicken et al., 2018; Beaulac et al., 2019; Cooper et al., 2017; Jongbloed et al., 2016; Mashru et al., 2017; Rodrigues et al., 2021). Mashru et al. (2017) found that in videoconference teleconsultations on infectious diseases, patient satisfaction was 'very high' at 98% (p. 83). Rodrigues et al. (2021) use Likert scale surveys to measure patient satisfaction, and the article emphasises

positive patient feedback and willingness to continue. In these articles, however, patient satisfaction is not clearly defined and is concluded only via a quantitative measure. Given the high variability in the healthcare provided and the models of care, it is difficult to extrapolate what patient satisfaction means across different telehealth services for different health conditions. Further research is needed exploring patient experiences of and perspectives on high-quality telehealth care for HIV, hepatitis C and STIs.

## Privacy and confidentiality

Of the 22 publications reviewed, five mentioned improved privacy and confidentiality for patients as advantages of telehealth (Aicken et al., 2018; Anderson et al., 2017; Horwood et al., 2020; Marent et al., 2021; Mashru et al., 2017). Anderson et al. (2017) address these issues from the perspective of healthcare practitioners, who report that telehealth increased patient privacy. The remainder of the publications comprise qualitative studies with patients (Aicken et al., 2018; Horwood et al., 2020; Marent et al., 2021), and a patient satisfaction survey that included an instrument on privacy (Mashru et al., 2017). These also found that patients generally felt telehealth helped them manage privacy. For example, in Aicken et al.'s (2018) study on the eSexual Health Clinic, for treatment and care of chlamydia, participants valued being able to access sensitive information easily online and without embarrassment. However, as explored further in the sections on telehealth disadvantages and healthcare modalities below, attitudes on privacy varied (sometimes within the same studies), in that privacy and confidentiality were also seen as challenges for telehealth care delivery (Aicken et al., 2018; Anderson et al., 2017; Horwood et al., 2020).

Related concepts of anonymity and relief from stigma were also mentioned in five articles (Aicken et al., 2018; Anderson et al., 2017; Day et al., 2020; Estcourt et al., 2017; Horwood et al., 2020). This was particularly prominent in the literature on STIs and telehealth, with telehealth seen as assisting in the avoidance of stigma and anxiety associated with the diagnosis of sexual health conditions (Anderson et al., 2017; Estcourt et al.,

2017). In one study, a nested qualitative study on STI treatment, interviews were conducted with 12 patients from a nurse-led telephone management program treating chlamydia and gonorrhoea (Horwood et al., 2020, p. 1). Patients reported that telehealth treatment provided greater anonymity than in-person care, because they were not required to attend a sexual health clinic. These are important issues that require further research in relation to the unique forms of stigma associated with the different health conditions addressed in this literature review.

## Efficient and consistent treatment

Some studies (n = 3) mention that one advantage of telehealth is that it allows for a more standardised approach to healthcare, with treatment actions programmed, or based on what is sometimes called an algorithmic approach to treatment (Horwood et al., 2020; Keogh et al., 2016; Marent et al., 2021). An algorithmic approach to treatment means that treatment follows a process or set of rules, which might differ by patient type or change following a particular test result, for example, but in general is standardised. For Keogh et al. (2016), standardisation describes a 'well-structured and well-communicated model of care tailored to the individual patient' (p. 463). This means that for people with a particular diagnosis, treatment will take the same form, and particular issues will trigger a particular kind of follow-up or change in treatment method.

A standardised approach to treatment is also understood to address gaps in care delivery associated with existing service models. For example, Horwood et al.'s (2020) evaluation of a centralised nurse-led, telephone-based management service for the screening and treating chlamydia and gonorrhoea finds it is a more efficient approach to the treatment of chlamydia and gonorrhoea than standard approaches. In contrast to treatment provided through general practitioners, the telehealth screening program was understood to give patients more direct access to specialist knowledge and up-to-date treatment advice in line with national guidelines and

recommendations. It was also thought to be beneficial because of improvements to partner notification and testing, although some participants in this study held different views about the best way sexual partners should be notified.

While several studies reviewed here present standardisation as a benefit of telehealth, standardisation is understood differently as it refers to varying degrees of routinisation in treatment. Marent et al. (2021) critically engage with the push towards standardisation and the algorithmic approach sometimes advocated in literature on e-health and telehealth (Horwood et al., 2020). They explore experiences of digital technologies in clinical encounters in HIV care, and argue that managerial attempts to standardise care are always negotiated rather than 'simply adopted' (Marent et al., 2021, p. 1118). They also show the limitations of standardised approaches to care. In their study, the app is seen as sufficient for simple or straightforward healthcare but insufficient for complex care and health conditions. While the literature discussed above suggests that the standardisation of care through telehealth is of benefit to patients, this is an issue that requires further research. Notably, most of the research above is conducted from the perspective of healthcare practitioners. More needs to be known about patient experiences of standardised or algorithmic healthcare, including how it shapes the healthcare encounter and quality of care received.

## Facilitating relationships

Three articles (notably, all qualitative) discuss the way that telehealth can facilitate positive relationships between healthcare practitioners and patients (Aicken et al., 2018; Marent et al., 2021; Rouleau et al., 2016). In Aicken et al.'s (2018) work on STI treatment, patients are reported to have appreciated the 'personal touch' of the follow-up phone call (p. 246). Significantly, the importance of video telehealth for relationship building was emphasised. Rouleau et al. (2016) discuss a 'virtual nursing intervention' to help people living with HIV manage antiretroviral therapy. The authors argue that the video engagement is necessary to

build 'trust and reciprocal relationships with patients' and 'caring interactions', achieved through 'eye contact with the camera, tone of the voice [and] language adapted to patients' health literacy' (Rouleau et al., 2016, p. 933). One practitioner using video telehealth for HIV follow-up care in Marent et al.'s (2021) study mentioned that hearing the voice and seeing the face generated a level of intimacy to the interaction that was close to that of in-person appointments (p. 1127). This research suggests that video telehealth is an important technology in building rapport, communication and trust between patients and healthcare practitioners. Although these studies were about the experiences of both patients and practitioners, it is notable that these statements explore practitioner perspectives.

## Conclusion

Overall, in-depth research on patients' experiences of telehealth for treatment of HIV, hepatitis C and STIs is scarce, with publications mainly focussed on healthcare practitioner perspectives. However, the research conducted to date offers some preliminary insights. It suggests telehealth may benefit patients by:

1. Improving accessibility to treatment by removing geographical barriers and improving access to specialist care
2. Assisting in providing private and confidential treatment, especially for the treatment of STIs
3. Contributing to the standardisation of treatment
4. Improving rapport and trust between healthcare practitioners and patients where video telehealth is employed

However, as noted, this body of research is small, and more work needs to be done to include and explore patient perspectives on high-quality telehealth care, especially in relation to what patients prioritise in telehealth encounters across the treatment of different health conditions.

## 1.2 Disadvantages of telehealth for patients receiving care for HIV, hepatitis C and STIs

This section of the review addresses Aim 1 by exploring disadvantages of telehealth for patients receiving treatment for HIV, hepatitis C and STIs. While the literature included here more commonly focusses on the beneficial aspects of telehealth, a small number of articles (n = 6) provide insights into some disadvantages of telehealth for patients. As already mentioned, some of the themes below were also mentioned as advantages of telehealth, reflecting the complexity of patient experiences, particularly in relation to issues of accessibility, privacy and confidentiality. The key disadvantages of telehealth described below are: problems adopting and accessing telehealth; difficulties with managing privacy and confidentiality; and concerns about the effects of telehealth on the patient-practitioner relationship and quality of care.

### Problems with technology and access

Problems with 'digital literacy' or adopting new technology in healthcare settings are not covered in much detail in this literature. However, a small number of studies (n = 5) acknowledge that telehealth may not be easily accessible for more marginalised people, or those with lower digital literacy (Beaulac et al., 2019; Jongbloed et al., 2016; Jongbloed et al., 2020; Khan et al., 2017; Naghdi et al., 2017). This research observes that telehealth access is directly shaped by social, material and economic forces, with greater problems in accessing telehealth faced by those who are more marginalised or experience socio-economic disadvantage.

In a study by Jongbloed et al. (2020) on mobile health for HIV treatment, some patients had mobile phones but many had problems 'maintaining cellular connectivity', due to 'high costs and existing debts with providers' (p. 8). Circumstances such as periods of imprisonment, housing transitions,

relationship breakdowns, and missed payments on mobile phone bills also present barriers for telehealth.

Beaulac et al. (2019) conducted a study to assess the feasibility of using mobile technology in treatment for hepatitis C, as well as patient attitudes towards telehealth, across hospital and community health settings. They found that 78% of participants owned a mobile device, and of these, 69% had internet access. Fewer participants from community health settings were comfortable with internet or app use, and these participants were on average less comfortable with texting. Level of comfort with texting, internet and app use was also correlated with socio-economic status and treatment experience, with people earning an income of less than C\$30,000 or who had not been treated for hepatitis C less likely to report access to the internet and mobile technology. Approximately half 'liked the idea' of using a mobile phone for clinical care, while the remainder expressed dislike or uncertainty (Beaulac et al., 2019, p. 15).

### Difficulties with managing privacy and confidentiality

While improved privacy and confidentiality was thought to be a benefit of telehealth, four articles address issues telehealth generates for patients' privacy and confidentiality. In a qualitative study by Jongbloed et al. (2020) on attitudes to mobile health management for HIV, some patients were concerned that it might be difficult to know 'that you're talking to the right person' when disclosing personal health information. Patients in this study also expressed concerns about managing privacy if they had to borrow a phone to access care. Participants in Beaulac et al.'s (2019) study on preferences for mobile technology among people with hepatitis C also expressed concern about 'privacy issues' when using mobiles for healthcare, but this is not explored further in the article.

As we observe in the report to which this literature review is linked, privacy at work or in other public settings was also an issue for people who accessed telehealth healthcare (Marent et al., 2021). In Aitken

et al.'s (2018) study of an STI screening and treatment program, privacy was sometimes threatened during transitions from telehealth to in-person treatment. A small number of patients had trouble accessing treatment in the pharmacy collection process due to poor knowledge of the program by pharmacy staff (Aicken et al., 2018). Patients explained that this had an effect on privacy because they had to explain their needs to the pharmacist in front of other customers (p. 245). This research indicates that telehealth can raise issues of privacy and confidentiality for those who use it for HIV, hepatitis C and STI treatment and care. Overall, privacy and confidentiality are shaped by access to resources, material support and organisational and administrative oversight.

### Concerns about quality healthcare

As discussed above, research on the effect of telehealth on treatment relationships was exclusively qualitative. While this method can afford detailed explorations of such issues, even within these publications, the negative effects of telehealth on the relationship was a small theme. In a study by Marent et al. (2021) on digitised follow-up in HIV care, both doctors and patients found that telehealth interactions (via app, phone or video) 'did not create the same openness as the face-to-face situation' (p. 1129). Telehealth platforms did not convey non-verbal cues and were generally focussed on biomedical measurements. The authors argue that the platform also narrowed the relationship to a '*highly specific role relationship*' (p. 1129, italics in original) in which consultation activities were prioritised over more in-depth considerations of the person, and personal needs and preferences. The authors also note that this limitation is exacerbated by a standardised or algorithmic approach to treatment (Marent et al., 2021). Similarly, Anderson et al. (2017) conducted a survey of healthcare practitioners exploring perceptions of telehealth for HIV treatment. These practitioners were also concerned that telehealth 'does not allow for a comprehensive assessment of their patients' health' and worry that 'patients may not feel adequately connected to them as a provider' (p. 1).

Also related to changes in the patient-practitioner relationship is the inability to conduct physical examinations via telehealth. In Mashru et al.'s (2017) study of telehealth for hepatitis C in remote areas, clinicians felt 'examination [...] was limited by poor image resolution' and identified the inability to conduct a physical examination as a drawback (p. 85). Patients in the study discussed above by Marent et al. (2021) likewise report that physical examinations were not facilitated in virtual encounters. The authors suggest that bodies have less of a focus in telehealth, and opportunities for the diagnosis of other health conditions are reduced. More research is required to explore changes in patient-practitioner relationships and patients' experiences of HIV, hepatitis C and STI care beyond the limited range of issues, and limited timeframes, covered here. Namely, do patients feel understood by healthcare practitioners, are their concerns being addressed in a sensitive and caring way, and are their health issues being identified and treated effectively over time?

## Conclusion

As mentioned at the start of this section, material on or discussion of the disadvantages of telehealth for patients was smaller ( $n = 6$ ) than research on the benefits of telehealth. This perhaps reflects the type of studies typically done on telehealth care (e.g. mainly quantitative) and the focus on professional perspectives. The research points to emerging issues for patients such as problems adopting new technologies, concerns about privacy and confidentiality, and changes in the quality of the patient-practitioner relationships. Importantly, given some of these disadvantages are only addressed in a few articles (all qualitative), they require further research and exploration. These include but are not limited to how patients see telehealth as affecting patient-practitioner relationships, experiences of standardised approaches to care, and particular aspects of the treatment of HIV, hepatitis C and STIs not well served by telehealth.

## 1.3 Comparison between telephone, video and in-person experiences of quality of care

This section addresses Aim 1 by focussing on experiences of different healthcare modalities in telehealth care delivery. There is little dedicated in-depth research on patient experiences of different healthcare modalities, and this literature mainly addresses treatment for STIs and HIV. Existing research, all of which has been discussed above, suggests that while telephone telehealth may be convenient and accessible, the quality of care it offers is limited compared to video telehealth or in-person care.

### Experiences of different healthcare modalities

No in-depth research was found on overall experiences of telehealth care in relation to different healthcare delivery methods (e.g., telephone, video and in-person). However, some ( $n = 3$ ) qualitative research addresses the effects of healthcare modality on some aspects of care, mainly in relation to experiences of convenience and privacy (Marent et al., 2021; Beaulac et al., 2019; Jongbloed et al., 2020).

This literature suggests that that while telephone communication (e.g. app-based, text-based or standard phone) is valued as convenient because it can be accessed anywhere or anytime (e.g. at work) with relative privacy and anonymity, the quality of care itself is 'limited' (Marent et al., 2021). According to Beaulac et al. (2019), texting was considered convenient and efficient by a small majority of participants receiving treatment for hepatitis C. However, a significant minority did not like the idea of using mobile phones because of obstacles such as limited access and digital literacy, as well as the impersonality of the medium. In Marent et al.'s (2021) description of app-based care, interactions were often based on 'templates', and the reduced reciprocity of an interaction was

seen to affect the ability of healthcare practitioners to handle highly complex situations (p. 1130).

Phone conversations were thought to resemble traditional consultations more closely than app or text-based telehealth appointments. However, as discussed above, they were also seen to create problems in building rapport, because patients and healthcare practitioners cannot see each other. Phone telehealth also presented challenges, because patients had to find private settings to take calls (Marent et al., 2021). Issues related to accessing private space were especially pronounced during COVID-19. In a study on sexual health service attendance during COVID-19, phone calls were seen as causing problems for young people due to lack of personal space (Thomson-Glover et al., 2020). However, for others, phone telehealth was seen to enhance privacy and control, because place and time of access could be chosen (Jongbloed et al., 2020, p. 7).

In contrast, videoconferencing and in-person care were respectively seen as less convenient and less anonymous. They provided greater relational engagement and attention because of the 'multiple cues, immediate reciprocity and personal focus' afforded by the video or in-person interaction (Marent et al., 2021, p. 1120) but were more location- and technology-specific. Videoconferencing was understood to be less convenient than phone telehealth because patients have to be in a particular space and have particular technology available, and they may also have to do more work to ensure privacy and access to technology, such as going home from work to use their home computer or attending a hospital or clinic telehealth site (Marent et al., 2021). Video consultations were also found to sometimes require patients and doctors to revert to a telephone call, due to 'technical problems' that impeded the consultation (Marent et al., 2021).

Marent et al. (2021) suggest that the in-person interaction allows healthcare practitioners to 'understand and negotiate the uniqueness of each patient' (p. 1119). In-person appointments are understood to have



a role in building rapport with patients, complementing care delivery by other means (Marent et al., 2021). However, in-person appointments presented challenges for some patients, who mentioned choosing a clinic outside their immediate neighbourhood to avoid seeing people they knew, framing in-person appointments as potentially threatening to privacy (Marent et al., 2021). Going to the clinic also required stigma management strategies, such as explanations for absences at work.

### Preferences for different healthcare modalities

A strong theme in the literature was that patients had preferences regarding healthcare modalities based on the information or results being communicated in the appointment (Bissessor et al., 2017; Horwood et al., 2020; Knight et al., 2019). This is especially pertinent for the treatment and care of HIV and STIs via telehealth, with all articles in this section addressing these health conditions. For example, Bissessor et al. (2017) found that delivering negative HIV test results by telephone is safe and efficient for men who have sex with men; however, positive test results were still provided at an in-person consultation. A similar study at the Sydney Sexual Health Centre (Knight et al., 2019) evaluated preferences for the receipt of test results, comparing text, phone and in-person communications. They found that 'ideally, several options for obtaining results should be available' (p. 88). Although many clients preferred results by text message, they often preferred a phone call if results were positive, and others preferred an in-person consultation if results were positive. In contrast to HIV diagnosis and treatment, a survey of patients enrolled in nurse-led telephone management program for chlamydia and gonorrhoea (Horwood et al., 2020) found that participants preferred a text message for a negative result, and a telephone consultation (instead of in-person) for a positive result. The authors found that this was due to embarrassment and patient preference to hear the results in their 'own environment' (2020, p. 7). Patients receiving HIV care in Jongbloed et al.'s

(2020) study also reported preferring mobile phone communication over in-person care. However, these studies rarely included qualitative data on the reasons for client preference based on healthcare modality. While the literature is small, it does suggest that attention to telehealth modality is especially important in the treatment of HIV and STIs, and during diagnosis and initial stages of treatment.

## 2. Issues unique to telehealth access and delivery for hepatitis C

In this final section we address Aim 2 by providing a more detailed focus on the unique considerations for telehealth access and delivery for hepatitis C treatment specifically. Mirroring the general gaps in research above, little research is available on unique issues for telehealth care delivery for hepatitis C. Because this review focusses on telehealth for current treatments, the literature search was limited to work published after 2016. Of the nine articles addressing telehealth treatment for hepatitis C in this review, six include material or information relevant to aspects of telehealth access and delivery for hepatitis C (Beaulac et al., 2019; Keogh et al., 2016; Mashru et al., 2017; Naghdi et al., 2017; Parfitt et al., 2020; Rodrigues et al., 2021). Of the five targeted publications reviewed for this section, three raise issues to do with technological and administrative support needs, and two discuss coordination and linkages.

While technological and administrative support needs are identified as issues for implementing telehealth for hepatitis C treatment and care (Keogh et al., 2016; Naghdi et al., 2017; Mashru et al., 2017) specific considerations and needs in relation to treating hepatitis C are unclear in the literature. Naghdi et al. (2017) conducted an educational needs assessment of healthcare practitioners for treating hepatitis C and found that

most participants reported 'inadequate access to [...] telehealth' (p. 3). Keogh et al. (2016) conducted a retrospective audit on a hepatology telehealth service in regional Queensland and found that the main obstacles from practitioners' perspectives were technological, with inadequate access to equipment in GP practices. This meant patients had to travel to regional hospitals to access care. The paper recommends the improvement of videoconferencing infrastructure to improve access. Likewise, Naghdi et al. (2017) suggest that initiatives to increase treatment uptake, such as telehealth, must be accompanied by programs and incentives to scale up access to necessary resources.

Linkage and coordination emerged as unique considerations for telehealth treatment for hepatitis C. Beaulac et al. (2019) argue that mobile device (e.g. phone or tablet) telehealth requires linkage services, including 'dedicated staff that facilitate the linkage of patients to services' (p. 12). They argue this is especially important in the context of the individual and systemic barriers people with hepatitis C face when accessing traditional care. Looking at regional Queensland, Keogh et al. (2016) explore the expansion of an 'integrated team approach consisting of two locally based nurses, an administrative staff member and a metropolitan-based specialist consultant, consulting exclusively via telehealth' (p. 460). The expanded model included an initial nursing consultation and 'nurse navigation' prior to the specialist appointment. This was understood to promote a much more efficient and effective model of care, resulting in increased service engagement and increased 'patient flow and engagement' (p. 459). Importantly, while the results of this integrated model look positive, the increased responsibility placed on nurses in delivering hepatitis C care through telehealth requires further research. While nurses may be well placed to deliver telehealth care, such models need to be resourced adequately.

As might be evident, issues unique to patients' perspectives on and experiences of hepatitis C care via telehealth are vastly under-researched

and not well understood. As noted in Rodrigues et al.'s (2021) study, many patients who present for hepatitis C treatment have a history of incarceration, are from low socio-economic backgrounds and have low digital and medical literacy. Although not a focus of their study, the effects of social inequality and marginalisation on telehealth access, engagement and experiences of hepatitis C care urgently need further research. There is much that needs to be understood about the access and delivery needs of people living with hepatitis C. It is not possible from this literature to provide detailed conclusions about the unique challenges for hepatitis C treatment via telehealth, except to note that marginalised and disadvantaged populations are generally more likely to struggle with telehealth models (Beaulac et al., 2019; Jongbloed et al., 2016). Our research contributes to this understanding and points to important areas for further research, such as administrative linkage and coordination, the role of pharmacies, the role of organisations and peak bodies in supporting technological development, and the role of peer workers in supporting care and lessening stigma.

## Conclusion

This literature review analysed 23 articles covering issues relevant to the targeted aims of: (1) addressing the benefits and disadvantages of telehealth for STIs, HIV and hepatitis C (including a comparison between different modalities); and (2) identifying unique issues relating to telehealth access and delivery for hepatitis C treatment. The literature in both cases was found to be limited in scale and scope, largely quantitative, and with little attention given to the experiences of patients.

The main benefits of telehealth described in the small body of available literature are: improved accessibility, convenience and satisfaction; better experiences of privacy and confidentiality; more efficient and consistent approaches to treatment; and improved clinical relationships. Research suggests that telehealth increases the accessibility of treatment and specialist care for patients with

STIs, HIV or hepatitis C by addressing geographical obstacles and reducing the need to travel. The research on STIs also suggests that patients with STIs especially valued having access to medical specialists and detailed information and support before attending in-person treatment. Some research on telehealth also suggests that it improves patient privacy and confidentiality, by affording access to potentially stigmatising or embarrassing information and healthcare online or over the phone. Standardisation – the process of making healthcare practices and services more efficient and consistent – is an emerging theme in the research and is presented as a beneficial aspect of telehealth for simple or less complex healthcare concerns, but little is known about its utility in complex cases. Compared to telephone contact, video telehealth was noted as improving care experiences.

However, the disadvantages of telehealth overlap with and complicate its purported benefits. In this sense, the review points to tensions in understandings of patient experiences of telehealth that require further research and consideration. While telehealth is thought to increase the accessibility of treatment, socio-economic position and 'digital literacy' can significantly shape telehealth access. A similar tension was identified in the research on privacy and confidentiality, with patients across various studies reporting feeling concerned about managing privacy online or in transitions between telehealth and in-person healthcare. While video telehealth, compared with phone and text message contact, was understood as improving the quality of telehealth consultations, some studies suggested that it also narrowed the healthcare encounter and was less comprehensive than in-person contact.

Little research has been conducted on patient experiences of different telehealth modalities. The existing research largely focusses on the treatment of STIs and HIV. Patients value telephone telehealth and mHealth interventions such as apps and text-only services as convenient because those with phones can readily access

them, but they find the quality of care to be limited. In contrast, while videoconferencing and in-person care were less accessible, the research suggests they allow greater relational engagement and rapport. Patient preferences for healthcare modalities were shaped by what was being communicated (e.g. test results) and the potential for stigma or embarrassment at the point of diagnosis. Further detailed research on telehealth modalities across the treatment and care of different health conditions, and at different points in care, is needed.

The final section of this review addressed the second aim: issues unique to telehealth access and care delivery for hepatitis C. Only a small number of articles address telehealth treatment for hepatitis C, and even fewer explored these issues in detail. While providing appropriate technological support and administrative infrastructure is identified as important for implementing telehealth for hepatitis C treatment and care, the literature does not explore issues specific to hepatitis C treatment. Research suggests that an integrated care model and care coordination by a dedicated staff member may be valuable in assisting people navigate telehealth. This area in particular needs further research.

Given the contradictions and gaps in the literature identified here, as well as the paucity of research on patient experiences of telehealth treatment for a wide range of health issues, there is much that remains to be understood about telehealth care experiences. Future research on patient experiences of telehealth for the treatment of STIs, HIV and hepatitis C should include detailed analysis of diagnosis, care, referral and follow-up, and linkage between different health services. This research would improve the knowledge base to allow improvements in and enhanced efficiencies for telehealth practices in the future.

# Study aims

**The study was commissioned by the Australian Government Department of Health. It sought to better understand the benefits, limitations and effects of the use of telehealth for hepatitis C treatment during the COVID-19 pandemic.**

## **The study aims were to:**

1. Investigate the experiences of people living with hepatitis C using telehealth for hepatitis C care delivery during the COVID-19 pandemic, and any impediments they identify to the use of telehealth
2. Investigate the experiences of healthcare providers using telehealth for hepatitis C care advice and delivery during the COVID-19 pandemic, and any impediments they identify for sustaining or enhancing implementation, uptake, engagement and retention
3. Explore the similarities and differences in perspectives on, and experiences of, telehealth care delivery among people living with hepatitis C and healthcare providers in order to improve hepatitis C care delivery
4. Explore how the uptake and expansion of telehealth for hepatitis C care delivery and treatment shape experiences of stigma for people living with hepatitis C
5. Develop recommendations to support the hepatitis C sector to optimise the use of telehealth where it's effective and valuable

# Method

This report is based on 40 semi-structured in-depth interviews conducted with patients (n = 15) and healthcare practitioners (n = 25) who used telehealth for hepatitis C treatment and care during the COVID-19 pandemic (2020 to 2021). Interviews were conducted across Victoria, New South Wales and Queensland. A stakeholder consultation process was undertaken prior to the study beginning to gain a preliminary understanding of telehealth care for hepatitis C during the COVID-19 pandemic in Australia. Interviews were conducted with eight stakeholders, including peak body representatives, healthcare practitioners and peers. Stakeholder consultation interviews were de-identified and coded using NVivo 12 qualitative data management software. A short report was developed that identified key themes in the interviews, which covered: perspectives on successful hepatitis C management via telehealth; key issues for the hepatitis C sector to optimise the use of telehealth; gaps in knowledge about telehealth for hepatitis C care delivery, especially related to COVID-19; concerns about the future of telehealth; and priority areas for research on telehealth for hepatitis C care delivery. These interviews and the resulting short report were used to inform the study aims and design, recruitment strategy and data collection materials.

Patient participants were recruited through a wide range of strategies. Recruitment flyers were shared with hepatitis organisations, community health organisations, alcohol and other drug services, needle exchange programs, tertiary hospitals, GPs, liver clinics, nurse practitioners and harm reduction services. The study was also advertised on various social media platforms. To be eligible, participants had to be aged 18 or over and have received hepatitis C care via telehealth at any point since March 2020.

The 15 patient participants were recruited from urban and regional locations in Victoria (n = 7), New South Wales (n = 3) and Queensland (n = 5). All accessed telehealth for hepatitis C treatment during the COVID-19 pandemic. Eleven participants had used phone telehealth, while only four had accessed video telehealth. Most previous studies on telehealth for

hepatitis C treatment in Australia have centred on treatment in regional areas (Bradford et al., 2016; Keogh et al., 2016; Lobo et al., 2015; Nazareth et al., 2013). In this study, 12 patient participants lived in urban areas when receiving treatment, and only three lived in regional areas.

Four participants engaged in treatment through telehealth with their community GP, eight through a tertiary hospital, two through nurse-led programs, and one had accessed care through a prison clinic. Ten participants were male and five were female. Twelve participants identified as heterosexual and three as LGBTIQ. Twelve patient participants reported that both they and their parent were born in Australia, three reported that they or their parents were born overseas. While the study originally proposed to interview 25 patient participants, movement restrictions, other physical distancing measures and frequent stay at home restrictions during the study led to reduced staffing and the closure of many health services, and patient participant recruitment was lower than expected.

The 25 healthcare practitioners were recruited through key organisations, snowballing and targeted invitation. They comprised GPs (n = 5); specialists such as hepatologists, infectious disease specialists, sexual health clinicians or gastroenterologists (n = 8); nurses (n = 8); harm reduction workers (n = 2); and others involved in hepatitis C care (n = 2).

The semi-structured interview schedules on which the interviews were based were developed with reference to the existing literature, stakeholder consultations and study aims. Patient participant interviews explored the effects of COVID-19 on everyday life, access to telehealth, experiences of telehealth, interactions with healthcare practitioners and experiences of stigma. Healthcare practitioner interviews explored the effects of COVID-19 on professional practice, knowledge of telehealth for hepatitis C care delivery, experiences of telehealth for hepatitis C care delivery, key professional issues and telehealth access and uptake.

Due to COVID-19-related restrictions, interviews were conducted with participants over videoconferencing or

phone calls, and all were audio recorded. Interviews ranged in length from 22 to 76 minutes. Interviews were conducted between February 2021 and July 2021. All participants were emailed an information sheet describing the aims of the study prior to the interview and/or had the aims verbally summarised and explained at the start of the interview. All participants were asked to provide verbal audio-recorded consent at the beginning of the interview. Patient participants were reimbursed A\$50 for their time and contribution to the research.

The interviews were transcribed, checked for accuracy and de-identified, with all participants assigned pseudonyms to protect their identities. The de-identified transcripts were entered into NVivo 12 qualitative data management software. Analysis proceeded using an iterative inductive approach in which a list of codes was developed based on themes emerging from the data, current research and the aims of the study. The coded data were then analysed to produce the report sections presented below.

This study obtained ethics approval through the La Trobe University Human Research Ethics Committee (HEC20432) and South Western Sydney Local Health District Human Research Ethics Committee (2020/ETH03250).

# Findings

The following sections discuss the study's key findings and recommendations. They are organised under the headings below. The order reflects the focus of the interviews on patient experiences of accessing and using telehealth for hepatitis C treatment, and healthcare practitioner perspectives on telehealth for hepatitis C treatment:

1. Accessing telehealth for hepatitis C treatment during COVID-19
2. Patient experiences of telehealth for hepatitis C treatment
3. Telehealth and practitioner-patient relationships
4. Professional experiences of telehealth for hepatitis C treatment
5. Accessibility and telehealth care delivery





# 1. Accessing telehealth for hepatitis C treatment during COVID-19

**This chapter addresses participants' experiences of the COVID-19 pandemic, including how it shaped everyday life and access to healthcare.**

Participants described a range of effects from the pandemic, and these varied according to the level of COVID-related restrictions in different locations. Effects included a shift to working or volunteering from home for a period, which for some increased social isolation. Some described increased harassment from the police due to greater public police presence, and others described instability and changes in housing arrangements. Several participants mentioned experiencing poorer mental health. The pandemic increased access to telehealth for most participants, often for the first time, although some had previous experience of telehealth because they had lived in rural areas or had experienced telehealth in prison settings. Accessing telehealth was preferable for some people, because they could avoid the stigma associated with in-person healthcare settings.

## Housing, employment and healthcare

Since March 2020, COVID-19-related restrictions have resulted in rapid and dramatic alterations to people's access to employment, education, healthcare and mobility. The effects of COVID-19 on the people we interviewed for this study varied depending on location and life circumstances, healthcare needs, employment and living conditions. For example, for some participants in Queensland, who had experienced fewer COVID-related stay at home restrictions and other restrictions, disruptions to everyday life were minimal. While some were able to accommodate changes during this period quite easily, others described precarious employment and housing arrangements that made responding to the hardships posed by COVID-19 more difficult. For example, David (52, M, Qld), was in precarious housing during this period, which affected his sense of security and ability to avoid risks associated with COVID-19 transmission. Damian (42, M, Vic) experienced homelessness during 2020, and at the time of his interview was living in a motel room allocated during Victoria's first period of stay at home restrictions. Views on these temporary allocations of accommodation were mixed. While Frank (64, M, NSW) appreciated government efforts to find temporary housing for people experiencing homelessness, he was critical such strategies did not happen prior to COVID-19:

*I know a lot of homeless people got housed very quickly when society wanted to protect itself, which was probably the only positive thing I've seen come out of COVID [...]  
Homeless people actually got housed in motels, and suddenly there was this, sort of, you know, availability of public housing to put people in.*

The effect of COVID-19 on employment was another key theme, with stay at

home restrictions and other restrictions impeding searching for work and employment opportunities. As Magid (36, M, Vic) explained:

*I mean general life, yeah, I mean doing [the] general things I was doing before was a bit harder.  
I mean, looking for work is a lot harder now.*

COVID-19 also impeded some participants' access to essential healthcare and services. For those participants with multiple health concerns, widespread restrictions and closures meant delaying seeking healthcare advice and treatment. The pandemic also magnified participants' concerns about their health. Participants with pre-existing health issues, including hepatitis C, described feeling a heightened sense of concern about increased susceptibility to COVID-19:

*At one point, I was more concerned at, you know, like I said, my journey with hep C and [whether] the strength of that drug that killed it, [cured] it or whatever, would have made me more susceptible to COVID. So I kept on getting temperature checks and, you know, had one or two COVID tests.  
(Rickie, 59, M, Vic)*

While the effects of COVID-19 were experienced differently across different states, access to stable housing and secure employment, as well as pre-existing health concerns and conditions, shaped people's ability to manage the difficulties produced by the pandemic.

## Stigma, discrimination, and access to services

Research shows that stigmatising and discriminatory encounters are already common for people who use drugs in Australia (Farrugia et al., 2019; Lloyd, 2013), but some participants reported even more frequent experiences of

harassment from police in public during the COVID-19 pandemic. Cam (41, M, NSW), for example, described being 'hassled' by police at his local shopping centre and staying home as a result:

*We had a big problem with police hassling people because they knew they were either drug addicts or homeless. So, me and my partner spent a lot of time inside. We weren't going out for days on end, because we were getting harassed just for going down to the shopping centre [...] Before COVID, we'd never really been hassled by the police at all, and then when COVID hit, I think in three weeks, we got pulled up something like 14 times.*

Frank (64, M, NSW) similarly observed increased targeting from police during this period:

*People were scared, specifically drug users. They were scared to be out and about because people were being stopped by the police and were told to stay home if they were on the street.*

Frank, who also volunteers as a peer advocate, also expressed concern that COVID-19 restrictions might affect people's willingness or ability to access harm reduction services:

*It was just my concern: were people sharing, were they able to get clean equipment, and if they were able to get to an NSP [needle and syringe program], were they able to get enough equipment, were the deliveries being made?*

Importantly, accessing telehealth helped some patient participants manage and avoid the stigma produced through over-policing or experienced during face-to-face healthcare encounters. Frank (64, M, NSW) thought telehealth made it easier for some people to seek treatment 'because there's anonymity involved'. Robert (57, M, Vic) also said that the availability of telehealth 'makes it easier' to seek treatment when stigma is a concern. Similarly, Lucy (F, 52, Qld) noted that telehealth could be more 'private' for seeking treatment for health concerns:

*Well, I suppose having the option of telehealth can be a little bit more private, you know. Sitting in a public hospital at the front of the gastroenterologist unit doesn't always mean that you have hepatitis C, you know, but to sit in a room with people [...] and look at other people going, 'Wow, you've got it too,' or 'Are you actually here for that?' [...] Yeah. So, it makes it a little bit more discreet, more private, because you can do it at home.*

## Stress, anxiety and isolation

In addition to the social, economic, and material difficulties described above, participants emphasised the emotional effects of stay at home restrictions and other COVID-19 restrictions. Worsening stress, isolation and poorer mental health were common among the people we interviewed during the early months of the pandemic. Magid (36, M, Vic) expressed that the heightened surveillance around COVID-19 transmission was 'horrible':

*I mean it's horrible being told to stay [inside, or that] 'You are going to catch this, you are going to die of this [... COVID-19] People are dying, watch out, keep away', [and] all that stuff that comes along with that [...] you've got to see your family and be normal, you know what I mean. Telephone is really nothing [in terms of keeping in touch] or the internet.*

Dan (42, M, NSW) was in prison for part of 2020 and described being further isolated because of COVID-related restrictions to visits:

*I was in prison, so basically, they just had me in lockdown most of the time in prison. I wasn't able to get visits [...] It made me just more stressed and more anxious.*

**I couldn't go in to work, and I couldn't get in to see my doctor, and I needed to see a doctor, so they just said, 'We could do a phone appointment' and I went, 'Okay, if that's how it's done these days'. I'm 52, so I don't know all these new changes that have come.**

ANDREA, 52, F, QLD

Some people, such as Cam (41, M, NSW), described managing restrictions, isolation and worsening mental health through heavier alcohol and other drug consumption:

*More drug use. Yeah, that's how [I managed], I pretty much just resorted to using more drugs [...] When my depression takes over and I start using more drugs, it affects my [volunteer work ...] So, yeah, it sort of sucks when my depression takes over and I can't do the things that I enjoy.*

Elena (39, F, Vic) also emphasised that her alcohol and other drug consumption was influenced by feeling isolated and disconnected from people she cared about:

*I felt pretty disconnected, and I was already struggling with mental health and also substance use issues. So that isolated me even more – well, me and my partner, I guess – and we were kind of estranged from each other at the same time.*

## Increased healthcare access

All patient participants experienced an increase in the number of available telehealth appointments, and in many cases were offered, and accessed, telehealth for the first time. Given the heightened uncertainty and hardships described above, the increased availability of telehealth during COVID-19 was valued by all participants in this study. They were able to gain access to more kinds of treatment or medical care than previously available to them and also accessed existing healthcare in different ways. Most described accessing hepatitis C treatment via telehealth as simple and straightforward. Both Dan (42, M, NSW) and Andrea (52, F, Qld) suggest that telehealth was quick, easy and convenient:

*[T]hey slot you in, so you go straight there and bang, bang, straight through. [It's] well organised. (Dan, 42, M, NSW)*

*It's probably more accessible for people, so yeah, I think it's more*

*accessible and that can only be a good thing, and it's free. (Andrea, 52, F, Qld)*

For participants with multiple, chronic or complex health issues, telehealth also improved experiences of healthcare access during COVID-19. For David (52, M, Qld), who lived in a regional area and was being treated for chronic pain and HIV in addition to hepatitis C, the availability of telehealth meant he was able to access a wider group of healthcare practitioners than usual. He said, 'I was really reliant upon being able to talk with medical professionals on the phone [...] Luckily enough, I did, I was able to. They would always make time.'

While patient participants valued increased telehealth accessibility, knowledge about changes in the availability of telehealth was an issue raised by some. Communication about the availability of telehealth for hepatitis C care was uneven. Some people explained they had not been made aware of these changes before they were offered the option of telehealth:

*I couldn't go in to work, and I couldn't get in to see my doctor, and I needed to see a doctor, so they just said, 'We could do a phone appointment' and I went, 'Okay, if that's how it's done these days'. I'm 52, so I don't know all these new changes that have come. (Andrea, 52, F, Qld)*

## Conclusion

The findings of this study support recent research showing the disruptive effects of the COVID-19 pandemic on healthcare access and service delivery (Amukotuwa et al., 2020; Hew et al., 2021; Searby & Burr, 2021). For many patient participants, pre-existing employment and housing precarity exacerbated COVID-19-related problems and hardships. More frequent experiences of harassment from police in public during the COVID-19 pandemic resulted in people staying at home, intensifying the isolation many people report experiencing during this time (Newby et al., 2020). Like the rest of the population, COVID-19 affected mental health, with many participants reporting feeling

stressed, anxious and isolated. For some of our participants who already face discrimination, COVID-19 compounded existing experiences of stigmatisation and criminalisation. Specifically relating to telehealth access and experiences, according to our participants, telehealth did increase access to healthcare and hepatitis C treatment during the COVID-19 pandemic. Many found telehealth straightforward, and some preferred it over attending a clinical setting, noting that the distance mitigated the potential for stigmatising encounters. It was also preferred as a means to manage chronic or complex health concerns, and concerns about susceptibility to COVID-19 transmission. By the same token, as explored in the following chapter, this study also shows that patients had to adjust their expectations of healthcare as a result of the shift to telehealth, and needed to put work into managing the shift to telehealth.

## Key recommendations based on these findings are:

- **Recommendation 1:** Efforts to improve telehealth accessibility and reduce patient exposure to and experience of stigma should involve peer advocates and harm reduction workers in the design and delivery of models of care and telehealth services.
- **Recommendation 2:** Efforts to help patients engage in telehealth for hepatitis C treatment should be strengthened through additional messaging and health promotion by government and peak sector bodies to advertise its availability and explain its features and processes.
- **Recommendation 3:** Healthcare practitioners working in the hepatitis C sector should consider engaging in clear and informed discussions with people accessing hepatitis C treatment about the availability of telehealth modes of service delivery.

## 2. Patient experiences of telehealth for hepatitis C treatment

**Although patient participants describe accessing telehealth as simple and straightforward, they also spoke about the work required to accommodate telehealth consultations and respond to the introduction of new modes and technologies of healthcare.**

This chapter explores how people managed telehealth consultations in everyday life, including privacy and confidentiality, amid other priorities. It then explores patient participants' preferences for managing and coordinating appointments, prescriptions and referrals, and describes their concerns about the effects of a telehealth model on experiences of healthcare. While patients saw more straightforward consultations as well suited to telehealth, they thought more complex healthcare needs were less likely to be met, and believed that face-to-face communication and physical examinations may sometimes be necessary for good hepatitis C treatment and care.

### Managing telehealth appointments

As identified in other research (Bensted et al., 2021; Dilkes-Frayne et al., 2019), for most participants, telehealth was seen as convenient; it removed the burden of attending healthcare appointments, which often involved long periods of waiting and travel. As Peter (53, M, Vic) explains, telehealth fitted more easily into everyday life:

*The doctor said, 'It's easy. If you want, we can do it over the phone, and I can even email you your prescriptions to your phone.' I thought, 'Well, that's great, you know, I don't really have to go anywhere.'*

Although healthcare practitioners expressed some concerns about the privacy and confidentiality of patients while attending telehealth appointments (see Chapter 5), these issues were not of central concern to most patient participants interviewed, and it was seen as possible to secure privacy in a telehealth consultation. For Robert (57, M, Vic) phone telehealth care felt 'a bit more private' than an office or surgery with other people around. For others, such as Cam (41, M, NSW) and Frank (64, M, NSW), privacy was not a concern:

*I didn't even think about privacy. I just took the phone calls like normal. I didn't really think about privacy or anything. (Cam, 41, M, NSW)*

*Privacy was not an issue. I knew the call was coming. I knew who I was talking to. I knew I was in a safe space wherever I put myself to accept a call. I very much doubt they had it on loudspeaker at the hospital, you know. Yeah, I felt okay with it, you know. (Frank, 64, M, NSW)*

However, while some people were sent reminders or had appointments organised in advance, others reported receiving regular unscheduled calls from

practitioners – sometimes referred to as 'checking in' or 'checking up' – rather than attending scheduled appointment times. While unscheduled 'check-ins' were appreciated by some participants, others described needing to manage these calls amid other responsibilities and activities, and across different settings such as their homes and workplaces, sometimes resulting in privacy and confidentiality issues.

The workplace was identified as an area of life that needed to be carefully negotiated to make telehealth useful and effective, and participants described needing to manage privacy if they were not at home or in a private space. For example, both Elena (39, F, Vic) and Andrea (52, F, Qld) describe receiving unscheduled calls at work:

*Oh God, in the car, while I was driving, [or] at work [...] while [I was] talking about my methadone, while my boss is in the next room, you know. [I was] sort of whispering, so that was awkward, and at home in bed. Yeah, [I took appointments] just anywhere, like on the train. Yeah, like, that's kind of what I liked about it, because I can be going about my business and do that at the same time. [I can] have the appointment at the same time. Not ideal, I guess, but for me, I was all right with it. (Elena, 39, F, Vic)*

*It was okay, because I work in a call centre. If I couldn't answer, I would send her a text [saying], 'Just at work, I'll call you on my break'. (Andrea, 52, F, Qld)*

For Elena and Andrea, although receiving these calls was not optimal, the convenience of fitting healthcare into everyday life outweighed their concerns about privacy. Others, such as Frank (64, M, NSW), reported some initial concern about unplanned telehealth appointments:





*It was a little bit uncomfortable and a bit strange in the beginning, but then I got used to it, you know. Like, it grew on me and stuff. Now I am quite comfortable with it, you know. If someone wants to ring in and check up on me, that's fine, you know.*

Similarly, Rickie (59, M, Vic) preferred to be at home when he took his health-related calls:

*I didn't feel comfortable doing them, or accessing it or starting the process or doing the interviews whilst out, which is interesting, yeah. I didn't think of that, but yeah, I always used to think I should be at home. Obviously, I could have been walking and talking.*

Participants also describe saving healthcare practitioners' numbers so they could identify callers easily:

*They weren't scheduled, she would just ring me [...] I was fine with that. I had her number in my phone [...] so I knew when she'd call me. If it was a private number, I wouldn't have answered it. (Andrea, 52, F, Qld)*

*Yeah, she did [call me 'out of the blue'] If I couldn't answer the phone, it would leave a message [...] and I know her phone number anyway, and I would just ring her back when I*

*had time, and if she was able to talk to me she would, or she would say to me, 'I'll get back to you' [...] I didn't mind when she was checking on me and stuff. (Sharon, 57, F, Qld)*

Our interviews suggest that unplanned or unscheduled telehealth phone calls were common. While the convenience of telehealth appointments mostly outweighed participants' concerns about privacy and confidentiality, patients should not be asked to make the choice between privacy or convenience. Follow-up consultations and 'check-ins' should be scheduled and planned in advance so patients can better manage privacy and confidentiality, and to improve the quality of the telehealth encounter. This would also aid healthcare practitioners in managing their concerns about confidentiality, which are explored in Chapter 5.

## Flexibility and convenience

Like healthcare practitioners, patient participants identified a flexible approach to scheduling appointments and follow-ups as important to a positive experience of telehealth. Most people reported that their scheduled telehealth appointments started on time, although this too could vary. Patients whose appointments were delayed suggested these delays were easier to manage if they were at home

as opposed to being in a waiting room.

*The telehealth appointments were, let's say, I don't know, maybe half the time, still late, like, possibly still up to an hour late. Obviously, some people have a lot to say over the phone, even though they weren't there in person, but it [delays were] a lot easier to manage, because I didn't have to be there sitting and waiting. I could be wherever I wanted to be, with my phone in hand. (Elena, 39, F, Vic)*

Patient participants appreciated when healthcare practitioners were flexible with rescheduling appointment times and follow-ups. Rickie (59, M, Vic) explains:

*The first time they rang I missed picking it up, and I thought 'Oh my God', but it was so easy. A couple of times they would say, you know, 'We just missed you, we will ring back in five,' or ... do you know what I mean? It was really good, yeah.*

Overall, the ease of accessing telehealth from home, reminders about upcoming appointments, and flexibility in managing delays and waiting for appointments meant that participants' views on telehealth were mainly positive. Indeed, some were reluctant to return to face-to-face treatment when it became available. As Elena (39, F, Vic) explains:



*In fact, they went back to face-to-face appointments at [healthcare organisation 1], and I didn't know. I had one [appointment] and I called up and they're like, 'You were supposed to come in'. I was like, 'Oh, I didn't know, sorry', but, yeah, 'I really like this phone thing and is it okay if we just do it [via the phone] again', and they were really good about it.*

### Coordinating prescriptions and referral

Participants also described changes in the issuing of prescriptions, pathology forms and other referrals that mostly improved their experience of care and convenience. Methods for coordinating different aspects of care varied widely across the different health settings described in this project. Some common themes emerged, however, and overall patients such as Peter (53, M, Vic) valued the convenience of being able to attend local pharmacies and pathology clinics and have eScripts sent to their mobile phones, or prescriptions sent directly to pharmacies:

*I'm normally just going down there to get the script from the doctor or something like that, or some medication, but they wouldn't let me go down there [during COVID-19]. So the doctor said, 'It's easy. If you want we can do it over the phone and I can even email you*

*your prescriptions to your phone.' I thought, 'Well, that's great, you know, I don't really have to go anywhere.'*

Patients needed to carry around paperwork less often and found this convenient. However, those who had to wait to receive prescriptions or referrals through the mail were more likely to have concerns about receiving that paperwork, which were exacerbated by the performance of the postal system during 2020. As Shaminder (71, F, Vic) said about her experience:

*Then you have to wait ... normally you get all the scripts and everything straight away [... but during COVID-19 there was a] time delay in the time the scripts and everything came in your mail [... Around] that time [the] postal system was really bad and it took a long time for the scripts to come back. So that just creates, like, you know, just a little bit of anxiety about when I'm going to get that mail, and when it's going to come in the post, and those sorts of things.*

Similarly, while reminders from healthcare practitioners and healthcare services were seen as helpful for remembering and managing telehealth appointments, when they were sent by mail, this could cause significant anxiety due to postal delays.

## Limitations of telehealth

### Preferring face-to-face consultations

Like healthcare practitioners, patients perceived treatment for hepatitis C as relatively straightforward compared to the treatment for other health concerns they reported experiencing, such as ongoing advanced liver disease, diabetes, mental illness, cancer, surgery recovery, acquired brain injury, and chronic pain. While other research has found telehealth care comparable to that delivered in person (Schulz et al., 2020), some of the patient participants in this study thought telehealth lacked the intimacy and care of face-to-face appointments. For example, Elena (39, F, Vic) and Cam (41, M, NSW), would have preferred more engaged and lengthier healthcare encounters.

*I felt less, you know, connection, for lack of a better word, with my fellow human, who happens to be my GP. You know, it felt like ... it sometimes felt like ... not rushed but just a bit fast, you know, and so the extra, you know, maybe support or conversation that I might have got in person, maybe wasn't happening as much over the phone, but you know, I don't see that as a whole negative. It's kind of a by-product [of telehealth]. (Elena, 39, F, Vic)*

**The first time they rang I missed picking it up,  
and I thought 'Oh my God', but it was so easy.  
A couple of times they would say, you know,  
'We just missed you, we will ring back in five,'  
or ... do you know what I mean?  
It was really good, yeah.**

RICKIE (59, M, VIC)

*I've been alone a long time and my doctor was like a mother figure. Every appointment I'd always be proud to go and see her, because I'd have all this new stuff to, like, tell her [...] It's very hard [...] building such a relationship with my doctor and then sort of being told, 'No, you can't see her face-to-face until COVID dies down', and it was like seven months, six or seven months, until I was actually able to see my doctor face-to-face. (Cam, 41, M, NSW)*

For some people, concerns about the impersonal character of telehealth meant they would have preferred to continue face-to-face appointments:

*[W]hen COVID hit, all that stuff had to be done via Zoom, or over phone or by phone, and it was good to talk to my counsellor and my nurses in other areas when they [...] rang in to] check how I was going or [for] a quick doctor's appointment. I'm from the old school. I really like face-to-face. (Frank, 64, M, NSW)*

Importantly, while hepatitis C treatment could sometimes be very simple and quick, other healthcare needs were not always well managed via telehealth. Magid (36, M, Vic), for example, explained that while the treatment at the tertiary hospital clinic was straightforward, he had his other healthcare needs, which he described as 'not as straightforward', addressed by his local health organisation, with which he had a pre-existing relationship. He was not comfortable using telehealth for these purposes.

Others described difficulties in explaining health concerns over telehealth (see the following chapter for further analysis of communication). Cam (41, M, NSW), who used telehealth for multiple health issues, said that while he had few difficulties with telehealth, he struggled to communicate health concerns without showing his doctor physical issues or symptoms.

*I have a few health issues pop up here and there, which I always talk to my doctor about, and not being able to speak to the doctor face to face, it's very hard to explain*

*certain issues over the telephone [...] The main problem was just communicating the issues. I was being bitten by something, or I thought I was being bitten by something. I was trying to explain to my doctor how I had these, like, mosquito bites on my body. I guess, because I said 'like mosquito bites', she actually assumed they were mosquito bites, and it was really hard to convey to her they weren't mosquito bites [...] trying to explain something like that to a doctor without physically showing them is very hard, because I don't know any medical terms for things like that.*

This was especially significant for participants for whom English was not their first language. Shaminder (71, F, Vic), whose daughter was present at the interview and interpreted for her, described how it was easier to understand and communicate when she could see the healthcare practitioner's facial expressions:

*The phone [...] like, it's quick [but] sometimes you miss [information], because you can't see the person. So, focussing on what the other person is saying [is important]. By the time the other person [has] finished talking, you just forget, but with the face, you just remember it [more easily] ... what the person said first, and what's the second and the third [thing said]. Yeah, so it's just easier [...] to understand. Yeah, especially [with the] barrier of language.*

The lack of face-to-face contact led some participants, such as Andrea (52, F, Qld), to express concerns about the quality of diagnosis over telehealth.

*Well, I didn't feel one way or the other [about telehealth]. I just didn't think that they would be able to get ... like you know, I wasn't upset [...] I just thought to myself, 'Well if there was something wrong, then they couldn't really do such a thorough diagnosis,' if that makes sense.*

This tension reflects some healthcare practitioners' perspectives about diagnosing or treating health conditions

related to hepatitis C without physically being able to examine patients. While findings suggest that phone telehealth is suitable for most aspects of hepatitis C treatment, patients and healthcare providers emphasised that when health concerns and conditions were more complex, or when additional support needs were required, face-to-face care is still important. While hepatitis C treatment is increasingly seen as 'straightforward', this does not mean that telehealth is universally suitable for all people living with hepatitis C, particularly those dealing with complex healthcare needs and mental health issues.

### Confidence in telehealth technologies

Confidence in using different telehealth technologies was a key factor in patients' technology preferences (Tofighi et al., 2018). Most tended to feel much more confident in using the phone for telehealth appointments, and experience of video telehealth was much less likely (four participants). Some were not offered video telehealth and others opted not to use it due to preferences, access issues or concerns about operating the technology. Phones were seen as a more familiar and therefore reliable. However, this did not mean that telehealth appointments via the phone were straightforward or without complications. For example, while telehealth was perceived by participants as improving healthcare access, this was contingent on reliable mobile networks and infrastructure. David (52, M, Qld) mentioned that the regional town he lived in 'had very spotty mobile coverage'. He went on to explain, 'If I knew an appointment was coming up and I had to take it on the phone, I'd just walk up to the centre of town, really.' Although he did not express concerns about managing this issue, this example highlights the possibility that rural or regional patients, or patients with limited phone reception, may require additional support where phone reception is an issue. Further, in a context where phone telehealth is unreliable, it is likely that video telehealth is not an option, although it is potentially preferable for some health concerns or appointments.

Others, such as Damian (42, M, Vic), cited access to phones and phone credit as an issue. He lost his phone for a period of several weeks during his treatment period, which resulted in a break in his follow-up care:

*I did have some difficulties when I lost my phone for a bit, and they did a welfare check on me to see if I was still alive, which surprised me.*

More broadly, accounts such as these point to an emerging issue with telehealth – patients are sometimes responsibilised to manage problems that are structural, social and institutional in origin, such as limited phone reception and finances, and to manage the burden of change.

While several patients discussed the advantages of video telehealth, access to and confidence in the use of technology was a factor in its uptake. A recent study on the use of telehealth during COVID-19 in the comparable area of addiction health found that while it is convenient for most users, some are ‘digitally excluded’ (Hew et al., 2021). This is an issue for hepatitis C patients, because while telehealth has filled gaps in healthcare during the pandemic, not all patients can benefit from it (Hew et al., 2021). While some patients were confident in using videoconferencing – for example, David (52, M, Qld) explained that because he had worked in IT services for ‘most of [his] life’ he had ‘always been pretty gadget savvy’ – others were not. Rickie (59, M, Vic) stated that while he had used videoconferencing for telehealth once or twice, he was not confident in using it regularly:

*I think I probably would [use it], but I’m not super technologically up to date. I’m not bad, but I guess if I was a little bit better and, as I say, if things were a little bit opened up or easier, I would probably be even more in favour of the video side of things.*

Adrian (58, M, Qld) spoke about being assisted by a nurse to use videoconferencing at the hospital where he was receiving liver treatment. He preferred videoconferencing when he was supported through an in-person appointment to access and use it:

*They offered me the option [to do video teleconferencing at the hospital], but in the end, I’m five minutes away from the hospital [...] and it’s a good discipline for me [...] that I have to do it and go there, you know. If I’m at home, if I was doing it from home, there’s every chance I would run into the problems, like I did with you. I’ve just ducked out for a minute and got caught up or something like that, and I don’t want to waste their time. Their time is valuable. My time is valuable [...] There are benefits to going there. Yeah. If I don’t understand anything, I can just ask the lady what’s going on. Not that there’s much tricky stuff there, but you know, if I don’t understand something, I can always clarify it with her.*

In contrast, when others were given the choice between phone and video, participants often defaulted to phone. Robert had the option of videoconferencing, but he recalls, ‘I just said the phone will be all right’. When asked about his thoughts on video compared to phone telehealth, Peter (53, M, Vic) explained that like Adrian, he would need some guidance to be comfortable with it:

*You show me a little bit of what I have to do, I understand. I know what I’m doing and I will fly through it, but [...] when people like me with anxiety – it stresses me out [...] If they ran you through it the first time properly, then people will know [how to use it] and they won’t be stressed out about doing this teleconference thing, you know.*

These findings suggest that, while acknowledging the benefits of video telehealth, patients need additional support to be able to use it effectively. Significantly, as reflected in healthcare practitioner accounts in later chapters, video telehealth is preferred, and is said to improve healthcare when physical examination is needed (e.g. Cam’s ‘mizzie bites’). As evident in Adrian’s account of being assisted in using videoconferencing, support and training for patients around video telehealth would improve access and overall care.

## Conclusion

Overall, patient participants who spoke to us expressed that telehealth enabled access to care they may not have otherwise had access to (particularly during the pandemic) and was more convenient than having to go into a clinic. As with healthcare practitioners, they described hepatitis C treatment as convenient and well suited to a telehealth model of care. However, while treatment was described as straightforward, it is important not to overlook the practical arrangements people are undertaking to accommodate telehealth, including familiarising themselves with unfamiliar technology, walking to find reception and managing healthcare appointments, confidentiality and privacy at work and at home. Telehealth was also seen as less straightforward for people who had complex healthcare needs that required lengthier and more complex communication and physical examinations.

## Key recommendations based on these findings are:

- **Recommendation 4:** Healthcare practitioners should schedule and plan follow-up consultations in advance (except where patients specifically agree to, or prefer, spontaneous contact) so they can better manage privacy and confidentiality, and to improve the quality of the telehealth encounter.
- **Recommendation 5:** Healthcare practitioners should consult with patients about their preferred method of communication and avoid using the postal system for reminders, prescriptions and referrals unless absolutely necessary.
- **Recommendation 6:** Where video telehealth is supported, preferred and would be an advantage, organisations should consider offering patients an initial appointment with a specialist worker to support them in setting up and using telehealth videoconferencing.
- **Recommendation 7:** Services that support target patient groups should be funded to set up video telehealth hubs and/or infrastructure for telehealth appointments for existing clients.

### 3. Telehealth and practitioner-patient relationships

#### The patient participants interviewed for this study spoke about how telehealth shaped their relationships with healthcare practitioners.

Expectations varied between patient participants, with some preferring short, specific appointments, while others hoping for more communicative and caring encounters. Those who preferred a more engaged relationship explained that relationships were easier to maintain through telehealth if they were already established (e.g. with an existing GP or nurse). For some people, however, telehealth diminished the existing relationships they had with healthcare practitioners, by reducing the opportunity for broader conversations and personal updates. While disruptions in more engaged or collaborative relationships with healthcare practitioners were often seen as temporary or necessary due to the COVID-19 pandemic, this study suggests that the practitioner-patient relationship needs ongoing attention if telehealth continues to be used for hepatitis C treatment.

#### Enabling treatment initiation and follow-up

Both healthcare practitioners and patients said telehealth enabled a more proactive and consistent approach to hepatitis C treatment initiation and follow-up. Where this was done, patient participants noticed it, acknowledging the benefits of persistent or repeated attempts to provide information about treatment. For example, Robert (57, M, Vic) and Elena (39, F, Vic) both spoke about being repeatedly encouraged to start treatment:

*[They did] everything, you know, the doctors pushed me [... to start treatment], you know. He set me up to go and get on the treatment, I never did it [before] and then when I finally did it, he said, 'Oh good, about time you did it.'* (Robert, 57, M, Vic)

*My doctor was never overtly pushy about anything, you know, she was ... like, I could see when she was concerned about something about me or me not taking action around the hep C. I guess she didn't really understand what I was afraid of, you know, and what the hold-up was, you know, because in her eyes, I guess it seemed very simple and normal. She had been through it with other clients and stuff like that, so you know, she wasn't judgmental or anything, but I do remember having a few conversations where she's like, 'What are you waiting for?'* (Elena, 39, F, Vic)

As described in the previous chapter, while some patient participants expressed gratitude for practitioner follow-up calls, others found unscheduled phone calls challenging to manage. Similarly, as the accounts above suggest, there is also a fine line between encouragement to start treatment and feeling pressured by healthcare practitioners.

#### Trust, communication and familiarity

Trust and communication emerged as central themes in relation to telehealth, with some patient participants worrying about not being understood properly or not knowing the practitioner conducting the appointment (Liu et al., 2020). Some patient participants, such as Magid (36, M, Vic) and David (52, M, Qld), described how unfamiliarity with the healthcare practitioner diminished communication and comfort.

*It's a bit harder saying it over the phone and not understanding who you are talking to or ... who knows if you are talking to a female or a male.* (Magid, 36, M, Vic)

*The first couple of times speaking to someone, you're still trying to figure your way and find out what sort of person they are.* (David, 52, M, Qld)

While Frank (64, M, NSW) had not met his treatment team (based at a tertiary hospital) in person, he was satisfied that they were professional, and said that while his appointments were quite 'regimented', they made [him] feel comfortable.

Patients who had previously met their healthcare providers did not express this concern and spoke about the various benefits of having a pre-existing relationship. For some, it allowed appointments that better approximated the personal character of face-to-face appointments.

*I know my doctor pretty well. I wouldn't say we're friends, but it went easily and [it was] simple, and I felt comfortable enough to ask him [questions]. Where I didn't know the people [...] it was slightly different because, you know, I am asking more personal stuff and telling them personal stuff, so it was a bit different.* (Rickie, 59, M, Vic)

Other participants explained that pre-existing relationships with medical professionals lessened the difficulties of communicating via telehealth.

*I'm lucky enough that I have ... by the time we got to the point where telehealth became more important, I had a good relationship going with each of the medical professionals involved in my life anyway. [Telehealth] was just another way of communicating. (David, 52, M, Qld)*

For others, like Cam, an existing relationship with a healthcare practitioner who had some knowledge of ongoing health concerns and priorities made the telehealth aspect of care more successful:

*[My GP] knows that I can have very bad mood swings, and so she'd always try and make sure [... to] assess where my head's at first. Then she'd speak about the medication. It was like she was testing the waters. So she would talk about medications depending on what mood [I was in]. Because some days she'd ring, and I wouldn't really want to talk about medication [...] but it did help having her check in a lot. (Cam, 41, M, NSW)*

A pre-existing relationship also meant that when participants were informed about curing hepatitis C, 'cure' was experienced as more meaningful. Andrea and Sharon both spoke about sharing with their healthcare practitioners the excitement of clearing hepatitis C.

*It was awesome [laughs]. Yeah, it was really good. She just said, 'We've got the results', and 'great news', I was all clear [cured]. She asked again how I was feeling. I said, 'Yeah, fine,' and then she said she was rapt, she was really happy. [...] She] said, 'With those results and everything,' she goes, 'you are all cured'. (Andrea, 52, F, Qld)*

*She's really been such a good support, like, she should get votes for nurse of the year, I reckon [...] She's pretty good at her job, and when she rang me to say, [voice shifts] Oh, I'm getting emotional now; when she rang me to say I was cured, she was over the moon and so was I. (Sharon, 58, F, Qld)*

Patient participants, such as Andrea (52, F, Qld) and Sharon (58, F, Qld), also spoke about how caring and sensitive communication created comfort and ease:

*[The telehealth appointment went ...] really well, she was really down to earth and explained everything. She was really good, and she put my mind at ease. (Andrea, 52, F, Qld)*

*She's going to be checking on me anyway, which is a good thing. We're going to be keeping in touch. She wants to make sure that everything is okay, and I'm quite happy with that. (Sharon, 58, F, Qld)*

Significantly, interviews for this study suggest the importance of communication and reassurance in producing trustworthy and satisfying telehealth encounters. This includes making time and space for communicating about matters other than those just related to hepatitis C treatment.

### Stigma and non-judgemental healthcare

Perhaps unsurprisingly, comfort and trust in telehealth consultations, like other healthcare encounters, was dependent on healthcare practitioners demonstrating a lack of judgemental or stigmatising attitudes and conduct. As documented in Chapter 1, in a context where people living with hepatitis C may be 'highly sensitised

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rang me to say I was cured, she was over  
the moon and so was I.**

SHARON, 58, F, QLD



to negative judgements' due to ongoing experiences of negative judgement (Fraser et al., 2020), non-judgemental treatment was identified as important:

*They were really good [...] they just weren't judgemental [...] Like not being judged, that's it. No-one wants to be judged. (Dan, 42, M, NSW)*

Notably, as discussed in the following chapter, patients' comfort and trust is also an important theme for healthcare practitioners using telehealth. Confirming healthcare practitioners' suggestions that telehealth might be helpful for people for whom stigma and discrimination are barriers to accessing treatment, patient participants discussed that the social distance produced by telehealth was sometimes seen as an advantage. Where they did not know healthcare practitioners well, it was easier to speak to them without seeing and monitoring their reactions:

*I don't know. Maybe it's distance, maybe it's not seeing somebody's expression on the phone. I don't know. It puts that distance between you and the other person where, you know, you're not seeing the look of disapproval. You don't necessarily have the paranoid fantasy that they're looking or feeling disapproving of you. (David, 52, M, Qld)*

While Rickie knew his healthcare practitioner well, he wondered if others with hepatitis C would find telehealth helpful for this reason:

*Because you haven't got the facial [expressions] or just those feelings that you can pick up from people about how they [...] feel]. Yeah, once again, it's my opinion, but I would say that yeah, I would think telehealth, you know, would be one way of lessening [stigma]. (Rickie, 59, M, Vic)*

Participants' level of comfort with telehealth and communicating about their illness also often depended on their previous experiences with healthcare practitioners and their subsequent expectations for ongoing care. In explaining why he was comfortable with telehealth, David (52, M, Qld) explained

that he has 'been pretty lucky over the years to get good medical care' and that this is something not everyone has experienced. Others had fought to develop a good relationship with a doctor they like, and expressed the importance of that relationship:

*You have got to have a relationship with your doctor, a good relationship, you know. Obviously, it's not a marriage or a boyfriend/girlfriend relationship, but you've got to be able to trust this person. (Peter, 53, M, Vic)*

Sensitivity to communication can assist in developing caring telehealth encounters and managing negative associations related to previous experiences of judgement and stigma. These relational aspects of the telehealth consultation are key issues for healthcare practitioners to be aware of for future development of telehealth best practice.

## Conclusion

In line with recent Australian research (Javanparast et al., 2021) on the importance of an existing doctor-patient relationship for telehealth services to be effective, this study found that patients who had a pre-existing relationship with treating healthcare practitioners generally had a stronger relationship with them and a better experience of telehealth. The telehealth care was experienced as more trustworthy, communicative and caring, even if patients acknowledged at times that the intimacy in face-to-face appointments was missing. Experiences of telehealth were also contingent on previous experiences of healthcare, including stigmatising ones, which shaped their subsequent expectations for healthcare.

## Key recommendations based on these findings are:

- **Recommendation 8:** A telehealth care model for hepatitis C treatment should be embedded, wherever possible, in pre-existing healthcare relationships to support trust, communication and a positive experience of healthcare for patients

- **Recommendation 9:** In the absence of a pre-existing relationship between the hepatitis C treatment provider and patient, or an initial face-to-face appointment, MBS telephone items should support longer consultation times to improve patients' comfort, engagement and understanding of treatment.

# 4. Professional experiences of telehealth for hepatitis C treatment

**The previous chapters reported on how patient participants experienced the shift to telehealth care delivery for hepatitis C treatment during COVID-19. The next two chapters have a different focus, exploring healthcare practitioners' perspectives on and experiences of telehealth.**

First, observations about the effects of COVID-19 on hepatitis C treatment are explored, followed by how practitioners responded to the challenges of the pandemic by implementing and using telehealth for hepatitis C treatment and care.

Across different healthcare settings, organisations provided varying levels of institutional support for telehealth, with tertiary hospitals tending to be better prepared with existing telehealth infrastructure in place. Telehealth healthcare generated new administration and communication difficulties for healthcare practitioners, especially related to embedding telehealth consultations in existing systems for prescription and referral, and a new reliance on community pharmacists. While some healthcare practitioners thought telehealth care delivery impeded quality healthcare by reducing opportunities for connection and non-essential conversation, others thought it afforded more straightforward care and new insights into patients' home lives.

## Effects of COVID-19 on hepatitis C treatment access

COVID-19 affected the provision of hepatitis C treatment in many different ways, depending on provider location, the nature of the service and available resources. Some healthcare practitioners, such as Carol, a nurse in New South Wales, explained that they saw an improvement in numbers of people starting treatment with the introduction of telehealth:

*Well, the interesting thing for me was that our liver clinic and all liver clinics experience a very high no-show rate, particularly from new patients. It's not unusual at all to have 50% no-show rate, and interestingly with telehealth I was hitting sort of 80% attendance, because I think, you know, people find it easier just to talk on the phone. (Carol, F, nurse, NSW)*

The comments of healthcare practitioners chimed with those made by patient participants in explaining that telehealth has enabled some previously unengaged people to be treated:

*You know, there are some people that are agoraphobic. We've got clients that can't or won't leave the house for various reasons. I mean, it's providing access for those people, it really is, without me having to do a home visit, which creates all sorts of difficulties, you know, and in some cases, is completely impossible depending on where they are. (Lisa, F, nurse, Qld)*

However, not all organisations had the same capacity to implement telehealth, and some were severely hampered by stay at home restrictions and physical distancing restrictions, resulting in limited avenues for reaching new clients and reduced caseloads. Increased treatment uptake was dependent on pathways to care and whether referral systems were affected by

COVID-19. As one specialist in Victoria, Ian (M, specialist, Vic), explained, the Aboriginal health service he provided outreach services for was unable to offer telehealth, and as a result he was unable to continue attending the clinic. In particular, practitioners who normally referred new patients to treatment through alcohol and other drug services reported difficulty reaching new people because of service closures and reduced foot traffic through this period. For example, Mae, a harm reduction worker in Queensland, noted a change in the number of new patients she was referred for treatment:

*We got a fair few referrals, but then because organisations had to close down because of COVID [...] they didn't come through as fast [...] so] we did see a change. (Mae, F, harm reduction worker, Qld)*

Douglas (M, nurse, NSW) observed that when the needle and syringe program was closed, he lost access to a core group (people who inject drugs) who might be eligible for treatment:

*One of the main sources of my client base is through the needle and syringe program we have at our service [...] I'm the primary face to that service for people who are coming in looking for clean equipment, and during COVID that service was closed down [...] So, probably the main impact of COVID for me was losing that access to that core group of people who are my target group at the moment.*

Similarly, Naomi (F, harm reduction worker, Qld) mentioned that she was unable to do public presentations about the new treatments during this period and questioned the usefulness of telehealth in reaching new potential patients:

*Yes, we couldn't do it. We couldn't go out and do these presentations*



*to recruit the clients, so we did get a lot quieter over COVID [...] If you can't get out there in the world to get them, you can't get them you know. I think recruiting via telehealth would be extremely tricky.*

Healthcare practitioners were concerned that during the initial phases of the COVID-19 pandemic, when alcohol and other drug services were affected and GP attendance was down, fewer people were being tested, identified for treatment, and referred to their services. Importantly, while some services saw new patient numbers go down, other practitioners, such as Rose (F, nurse, Vic) used this time to more actively follow up with patients who had been in contact with the service previously but had not initiated or finished treatment:

*There were people that we'd been chasing for years, and their names would pop up all the time, but this time, because it was over the phone, we actually got hold of them, which was really good, and once we did, they sort of stuck with it.*

## Implementing telehealth

As our participants explained, COVID-19 necessitated rapid adoption of telehealth healthcare delivery for hepatitis C treatment (Schulz et al., 2020). Experiences of implementing telehealth technologies and administrative procedures varied widely between organisations depending on whether existing systems and technologies were in place. Tertiary hospitals tended to be better prepared for hepatitis C care delivery via telehealth where they already had existing infrastructure.

Ian (M, specialist, Vic), who works at a tertiary hospital, said, 'We were trying to [implement telehealth] before this whole pandemic sort of took off':

*We had a sort of program in place, and all the office spaces had a webcam and a speaker and microphone, and there was an icon to click on for telehealth on the desktop, and all that stuff. Even though it wasn't being used extensively, it was all there ready to go. So, when all of a sudden, we wanted to have everyone go to telehealth, we didn't have to rush around to JB Hi-Fi [retail store] to, you know, buy webcams or whatever.*

For organisations that had no prior telehealth systems in place, the burden of change tended to rest on individual staff members:

*When I say [telehealth] became available, a lot of the change in the way we practice was driven by our outreach nurse, who did a lot of research into how she was going to deliver this telehealth-type service [...] She found this virtual telehealth or virtual clinic platform where [...] patients could download a portal onto their smartphone and access the virtual clinic that way. She was the one who sort of dragged it up and got it working and got us all upskilled, and it worked very well from there on. (Tim, M, specialist, Qld)*

A nurse at a different service in Queensland mentioned a similar process:

*I'm a luddite when it comes to IT,*

*but I think [...] the thing for me is that, I guess, I'm hungry. I have to come up with the goods in order for this project to continue, and I just thought, you know, we're going to have to diversify, we really are. I think, you know, that we are fairly entrepreneurial. It's quite interesting really, because in the clinic the medicos were less keen to embrace that stuff, a bit reluctant, but I'm not hamstrung by that. It was basically, you know, if you want to do this, if you can show that it works, if it's confidential, if it's got all those things around it, then yeah, go for it, and so I did. (Lisa, F, nurse, Qld)*

## Organisational support, administration and communication

Institutional support for telehealth varied widely across healthcare settings. Support that was appreciated by practitioners included guidance on set-up, standardisation and technology acquisition, and troubleshooting assistance. Some practitioners described being satisfied with the organisational support, systems and guidelines put in place, and felt well-prepared to transition to a phone or mixed telehealth model:

*Our hospital was really proactive. They actually sent around emails saying, 'It's okay to fax these scripts through,' 'It was okay to email these scripts through,' and 'This is the process you need to follow.' So, that was really reassuring, and it took maybe a month to come through, but that was really good. (Belinda, F, nurse, NSW)*

However, others described being given limited support:

*Perhaps one of the most disappointing things from my point of view is I didn't feel that we were well supported by our hospital telehealth system. [...] It seemed to me to be an abrogation of responsibility. (Kevin, M, specialist, Qld)*

Telehealth necessitated adopting new and sometimes onerous administrative procedures, particularly relating to changes in organising prescriptions and pathology, but also for appointments and follow-up, and record keeping. For example, it varies from service to service, but many healthcare practitioners are unable to email prescriptions or referrals, and therefore rely on older technology to distribute these documents. Some participants (patients and practitioners) mentioned eScripts as a useful service, but not every service had access to this technology and there were some limitations on its use. Healthcare practitioners encountered some additional administrative hurdles in providing this paperwork to patients. Ian, a specialist in Victoria, noted that for patients to get hepatitis C treatment, it still required sending physical prescriptions and referrals, resulting in extra work for him and administrative staff:

*I mean, there was a [new] system where you print the scripts, you put them in a tray [...] An administrative staff [member] assists to send out pathology forms and scripts and so forth. You [have] got to get more into the workflow of the basic stuff, like just checking their addresses. (Ian, M, specialist, Vic)*

Others expressed similar views about telehealth consultations resulting in extra work to coordinate hepatitis C care. Belinda, a nurse in New South Wales, spoke about having to 'chase' blood test results and organise prescriptions that ordinarily may have been more easily managed through direct contact with the patient.

*It is extra work for us. We have to chase and scan results, blood test results, and they would turn up with*

*those, and we would then have to send out blood tests for them. We would then have to send out scripts, and then they would go missing and [we'd have to] chase them up and [do more] scanning and then emailing, and make sure the email address is right. So, it was a lot more logistically, it was a lot more work for us. (Belinda, F, nurse, NSW)*

Similarly, Benjamin, a specialist in Victoria, spoke about needing more detailed information about where a patient will fill a prescription so as to fax it to the pharmacy, in lieu of physically meeting with a patient:

*[W]here are they going to get the medication from when I write this prescription, which I'm going to write down today, where am I faxing it to? So, just sort of the crucial decisions and the nuts and bolts of starting treatment. (Benjamin, M, specialist, Vic)*

In this sense, practitioners spoke frequently about issues to do with the 'fit' of communication technologies with telehealth practice. In particular, echoing patient participant perspectives, healthcare practitioners described serious issues with the use of mail during the COVID-19 pandemic:

*The fax machine, the Australian post, and electronic [services], and you find a way [to] make it work. Of those three, Australia Post is the least reliable, fax machine is probably the most. (Benjamin, M, specialist, Vic)*

*You can't rely on Australia Post. You send things out, it could take three weeks, it could take one week, it just depends on which run you get [...] and that's something that we found. Because we've moved from having scripts filled at the hospital to posting scripts to patients, so that those scripts can be filled in the community pharmacies. But not knowing how long something will take, you can't be sure when the patient will get the script, when they'll fill it and when they'll start it. (Rachel, F, nurse, Vic)*

The fit of telehealth with existing communication infrastructure is a key issue for both groups, with healthcare and patient practitioners describing needing to manage the poor fit of telehealth consultations with older communication technologies. While healthcare practitioners experienced this as extra work and responsibility, patients typically describe these challenges as primarily related to concern about receiving timely prescriptions, referrals and medications.

### Relying on pharmacists

This study found that the shift to telehealth may have changed the relationship between prescribing healthcare practitioners and pharmacists, with some practitioners noting there was a new reliance on pharmacists to provide more information and care to patients. As Benjamin, a specialist in Victoria, explained:

*I might call the pharmacist and say, 'Look, I want to treat this person with this [medication]. Can you help facilitate that? I'm just not confident that they're taking on the information and that it's going to work'. That's definitely something that's just probably evolved in the last 12 [to] 18 months in terms of providing care to the patient. You know [...] using the pharmacist, as opposed to me sort of getting them into my rooms and talking to them about how to take the [...] medications]. (Benjamin, M, specialist, Vic)*

Healthcare practitioners such as GPs, nurses and specialists also described becoming more familiar with which community pharmacies are likely to dispense hepatitis C medicines to patients, and also involving pharmacies to a greater degree in screening:

*We specifically focussed on community pharmacies that were dispensing OST [Opioid Substitution Therapy] as a way to help find some people who required screening, education and treatment for hep C, and the response was excellent. We had a lot of interest from the pharmacists themselves because,*



**There were people that we'd been chasing for years, and their names would pop up all the time, but this time, because it was over the phone, we actually got hold of them, which was really good, and once we did, they sort of stuck with it.**

ROSE (F, NURSE, VIC)

*I think, the pharmacists that we engaged were giving us feedback that they recognised the clients that they were seeing didn't have the opportunity to sort of engage in a service like this. COVID was impacting people's willingness to attend a health service.*  
(Tanya, F, nurse, NSW)

While healthcare practitioners reported that they valued telehealth during the COVID-19 pandemic, they also relied on pharmacists, who were able to continue providing face-to-face service, to deliver detailed health information. As discussed in the previous chapter, patient participants also valued prescriptions being sent directly to community pharmacists. These practitioners expressed hope that this improved relationship between practitioners and pharmacists would continue.

### **Billing and financial concerns**

Concerns about the financial effect of telehealth varied across different practitioners and different settings. Interviews took place across a period of time when Medicare Benefits Schedule (MBS) funding rules were changing, with eligibility shifting from anyone to people who had a pre-existing relationship with the healthcare practitioner, then to provide exemptions for sexual health and hepatitis C treatment. As a result, there was some confusion about the future of telehealth across the interviews. Some practitioner participants mentioned the importance of billing support to the viability of telehealth in general or in their own specific circumstances (where Medicare was part of their funding model). Some were reliant on Medicare rebates and said that the changes in billing arrangements for telehealth enabled them to extend or introduce telehealth:

*Medicare funding [...] is a huge driver, and it's naïve not to recognise that as a big driver in how care is provided.* (Ian, M, specialist, Vic)

*The COVID change where Medicare made telephone calls rebatable, that's made a big difference. So, if someone doesn't have their own Skype address or iPhone for FaceTime or a computer for a Zoom call, you can just telephone them, and Medicare rebates you for that.* (Benjamin, M, specialist, Vic)

Matthew, a GP in New South Wales, also commented that before the new telehealth arrangements that allowed for phone calls, he was doing a large number of unbilled consultations:

*I am just much more comfortable having a long discussion with [the patient] over the phone [now] than I would have been previously, so that's an advantage [...] In general practice, I can be paid for a long discussion, whereas before the new telehealth arrangements, it was all voluntary work, which I certainly don't mind doing and I do, but you know, in general practice there are a lot of people with a lot of questions. You could spend an awful lot of time doing voluntary telehealth consultations.* (Matthew, M, GP, NSW)

However, where programs were funded separately by the Australian Government and practitioners do not bill Medicare for the services they provide, this was less of a concern. As Lisa (F, nurse, Qld) explained:

*You see, the good thing for me is that as a nurse practitioner, in a funded program, I don't claim Medicare rebates. So, there [were] none of [those] problem[s] around*

*telehealth funding under Medicare rebates.* (Lisa, F, nurse, Qld)

Because they were not driven by funding arrangements, Lisa's practice was able to rapidly expand its use of telehealth during COVID-19. Efficiency and costs were also mentioned by some as shaping the ongoing viability of telehealth, with some practitioners arguing that it is unclear whether telehealth is more or less efficient in terms of the relationship between time and billing:

*So, in some ways, we've been seeing more patients through telehealth, we've been busier. In other ways, it's been more inefficient. So usually, if a patient doesn't turn up to a clinic, you just rebook them at a later date, but when you do a telephone consult, you are spending, say, 10 minutes of your time, looking up the patient's notes, getting up to speed before you call them, and if they don't answer their phone, if someone doesn't actually attend, you're actually still wasting 10 minutes of your time ... so it's been more efficient in some ways, less efficient in others.* (Martin, M, specialist, Vic)

Further research may be needed to understand the effects of telehealth in terms of whether the increased administration and other additional costs potentially attributable to the use of technology for telehealth mean telehealth is more or less cost-effective than standard healthcare delivery.

### **Practitioner-patient relationships**

While the previous section explored the implementation experiences and support needs of healthcare practitioners using telehealth for hepatitis C care delivery,



this section explores how telehealth shaped rapport and relationship building for healthcare practitioners. Echoing some of the concerns described by patient participants in previous chapters, some practitioners expressed concern about how telehealth shaped the quality of practitioner-patient relationship:

*You don't get the whole feel for the person, and you're just dealing with what they're presenting. It's like the Facebook presentation of the patient. They'll always show you the best while they're in front of the camera. You don't get to see what's behind that, and you don't get that familiarity and, you know, maybe that's a blessing. Maybe that's, you know, what we should be doing. It's just looking at what's in front of us and dealing with the problem [...] I think sometimes we can get overinvested in [...] problems] that are outside the clinical realm, but you definitely don't get to develop relationships like you do in the clinical face-to-face consultations.*  
(Belinda, F, nurse, NSW)

While Belinda describes telehealth as impeding a richer understanding of the whole person and the development of closer relationships, she also wonders if the more narrowed 'clinical' perspective afforded by telehealth may be useful. This perspective was not typically supported by patient participants, who thought telehealth's capacity for briefer interventions may inadvertently hinder more holistic or person-centred care.

However, others described telehealth as affording new knowledge through insights into people's homes and social relationships. For example, Ian's (M, specialist, Vic) account of video telehealth differs significantly from Belinda's account above:

*I think [video is] better for rapport building. I don't know if that's the case, but I feel it is, and sometimes you really get a bit of a window into people's home situations, you know, houses and what people are doing and so forth, which people can sort of put their best show on for when they come to clinic.*

Some practitioners observed that telehealth affected the 'rhythm' or flow of an appointment or healthcare encounter. Like patient participants, practitioners describe telehealth as limiting opportunities for more casual conversations in which other concerns might be broached or contextual information about patients' lives might be shared. For example, Janet, a GP in Victoria, found the silences of telehealth led her to end telehealth consultations more quickly than face-to-face consultations:

*It makes the consultation much quicker, but the downside of that, I suppose, is [I find it a bit strange] having sort of silences on a telephone consultation, so I find that I'm ending the consultation pretty quickly then, and I'm not going [...] to ask] them more about how they're doing and if they have any risks or concerns. (Janet, F, GP, Vic)*

As Beth, a specialist in Victoria, explains, silences were also harder to decipher in phone consultations, as she was unable to see a patient's body language or facial expressions:

*It's much easier to sort of gauge what the silence is or the hesitation is, or to ask a question about the silence or the hesitation, I think, if somebody is face to face.*  
(Beth, F, specialist, Vic)

More broadly, phone consultations made it hard for practitioners to gauge if patients were understanding the information or advice being conveyed:

*You might not hear it in the voice [over] the telephone, and it's just my experience that if you can see people's faces, you get a better idea of if they appear to be understanding what you're saying or if they're a bit puzzled or perplexed, or if they're even perhaps paying attention to what you're saying.*  
(Kevin, M, specialist, Qld)

## Conclusion

This study found that experiences of telehealth implementation varied greatly,

depending on existing infrastructure, organisational support, the efforts of individual healthcare practitioners and access to Medicare rebates. Implementing telehealth necessitated new and sometimes onerous forms of administration, which individual healthcare practitioners often had to manage with little organisational support. The intersection between older forms of communication, such as mail and fax, newer telehealth technologies and the continuing need for patients to pick up prescriptions in person sometimes caused difficulties in delivering coherent, timely care, but also created new opportunities for collaboration with pharmacists. As for patient participants, relationship building was one of the more complex negotiations for healthcare practitioners, with experiences varying widely regarding how the different communication technologies shaped the quality of practitioner-patient relationships.

## Key recommendations based on these findings are:

- **Recommendation 10:** Healthcare services and organisations should oversee and resource the set-up and management of telehealth infrastructure and technologies to avoid placing the burden of change primarily on individual staff members.
- **Recommendation 11:** Given the greater involvement of pharmacists in information provision about hepatitis C treatment and medication regimes, future targeted education activities and hepatitis C training should address and include pharmacists.
- **Recommendation 12:** Further research is required on the effect of telehealth on healthcare practitioner time management and administration, in order to identify potential additional support needs.
- **Recommendation 13:** Organisations should provide training and support to healthcare practitioners delivering hepatitis C treatment and care through phone consultations, to assist them to better respond to and manage non-verbal cue and silences.

# 5. Accessibility and telehealth care delivery

**This chapter addresses the views of healthcare practitioners on the accessibility of telehealth beyond COVID-19, and explores their concerns regarding telehealth modes of healthcare delivery for hepatitis C treatment.**

Mirroring patient participants' accounts about access to adequate infrastructure, healthcare practitioners also reported encountering accessibility issues. Telehealth was also thought to provide an opportunity for less stigmatising healthcare encounters, but some practitioners also expressed concerns about patients' digital literacy, confidentiality and privacy, and the suitability of telehealth for serious hepatitis C-related health issues, such as liver disease.

## Concerns about accessibility

In line with previous research (Keogh et al., 2016), many of those interviewed described telehealth as enabling health workers to reach regional and rural patients, as well as people with multiple health conditions and additional support needs. As mentioned in the previous chapter, while COVID-19 was likely to have improved some patients' access to hepatitis C care, it was also thought to be potentially discouraging for those with lower levels of confidence in navigating the health system:

*[Accessing treatment] does sort of require a certain amount of health literacy, and in the injecting drug-using community, in the mentally ill, that health literacy isn't there, and so we have to take better care of them, and we have to find a way.*  
(Rose, F, nurse, Vic)

Other healthcare practitioners reflected that it was difficult to get a sense of people's access and support needs and the broader forces that might hinder telehealth access:

*My client group, often they don't have credit on their phone, or they won't pick up their phone. So, even if I leave a message, they don't have credit to receive their voice messages. [...] Phone numbers keep on changing, phones get lost.*  
(Janet, F, GP, Vic)

To meet these economic and technological challenges, some services provided additional assistance, such as providing phone credit for people:

*Maybe that's something for hepatitis councils to promote, because as part of our COVID response, we actually provided credit for people on their mobile phones so that they didn't lose contact with the world. Isolation was a big deal for a lot of people, and so it kept people connected and that was really important.*  
(Lisa, F, nurse, Qld)

Other services liaised with other community services, and enlisted family

members or other support workers to assist people to access telehealth:

*[T]he guy [I saw] who didn't have [a mobile phone], his brother helped. So, it's sort of just casting a net and seeing what else you can do.*  
(Rose, F, nurse, Vic)

Clearly, accessibility was a key concern for both groups of participants. While the potential for telehealth to make hepatitis C healthcare more accessible was widely agreed upon, ongoing barriers to treatment such stigma, discrimination, resourcing and health literacy were identified as similarly impeding the widespread adoption of telehealth.

## Video telehealth and digital literacy

Also echoing the concerns expressed by some patient participants, many of the practitioners we interviewed argued that video telehealth can be a useful and helpful option but has more significant barriers to access than phone telehealth. For example, as Belinda (F, nurse, NSW) explained:

*It was really quite nice [...] to see the patients. One of them was concerned they had jaundice, and I could look in their eyes, get them to come up to the camera and I could see they had a bit of jaundice, and so that was a bit of extra information rather than just over the phone [... However] a few times, the platform, the video conferencing platform, we had technical difficulties and we [couldn't] log on to this platform.*

Practitioners noted that because video telehealth is not as easy to access or reliable to use, it was less likely to be implemented across different healthcare settings. For these reasons, a phone delivery model for telehealth was the default option, often regardless of practitioner or patient preference, and its obvious limits for examination and diagnosis.

In addition to practitioner difficulties concerning implementation and the

reliability of the software, practitioners expressed concern about patients' digital literacy. This included their comfort and familiarity with video telehealth technology, their access requirements and confidence in using technology:

*To me, [video telehealth] wouldn't be quite the same, because the way the whole video telehealth thing is set up, someone really needs to be pretty computer-literate to do it, and it's not something you can do on the train. (Janet, F, GP, Vic)*

*Even though the technology is quite straightforward, you just download an app, you get given a PIN number by the nurse or the telehealth people, and you dial in at a certain time, we found that for a few people, we are having to actually literally ring them up and talk them through how to do it there and then. (Tim, M, specialist, Qld)*

According to practitioner participants in this study, and confirming what some patient participants said, video telehealth has additional support needs and patients require extra support in implementing video technologies. They were also concerned about the financial effects on patients:

*I think it would be great if we could get proper telehealth, but unfortunately a lot of our patients are not in a position to have, like, [high] download limits and all that sort of stuff, so they can't actually, you know, do a face-to-face on screen with us [...] If we could see somebody visually, I think that would give us a lot of information, but*

*you can't because they're just not financially placed to be able to do that. (Rachel, F, nurse, Vic)*

Patients' location and access to reliable internet were also cited as impediments to video telehealth:

*[T]hey have very little internet in some of those areas, so I think telephone care will be vital in helping to care for people who are more regional. (Rose, F, nurse, Vic)*

Both patients and practitioners suggested that video was only sometimes necessary or desirable, and for many it was difficult or impossible to use. One conclusion of this finding is that a requirement that video telehealth be used for all billable consults would be an impediment to delivering and accessing treatment and care for hepatitis C. However, when video telehealth is thought necessary or desirable, there needs to be greater support for it. Ian (M, specialist, Vic), who has a strong preference for video telehealth, argues that 'a structured funding system', where video telehealth is funded at a better rate than telephone, would incentivise practitioners to implement video telehealth where it is possible and appropriate to do so.

### Privacy, confidentiality and stigma

Concern for patients regarding privacy and confidentiality in telehealth appointments was an important issue for healthcare participants. They described having to adjust their own expectations about the privacy of the

healthcare encounter to align with patients' expectations and priorities:

*We are concerned about the potential for people to be in an environment that may not be safe for them to talk to us. (Kevin, M, specialist, Qld)*

*We talked about the etiquette around, you know, being in a private space and confidentiality [...] What we weren't comfortable with, you know, people in the background, people talking to you while they're driving down the highway. (Lisa, F, nurse, Qld)*

Practitioners described needing to make pragmatic assessments about privacy and confidentiality, and the potential to lose an opportunity to deliver hepatitis C treatment:

*It's that thing about if you don't talk to them then and do what you're both wanting to get done then and there, whether they're on the train to [the shopping centre] or in a car with someone else or outside the chemist, you've missed an opportunity. (Janet, F, GP, Vic)*

As identified in Chapter 2, some patients valued flexibility and preferred to have appointments while completing other everyday activities. Most of the healthcare practitioners interviewed were concerned about this issue due to privacy and confidentiality. However, at the same time, patient participants' accounts suggested unscheduled phone calls and reminders were common, and made it difficult to ensure confidentiality in practice. Privacy and confidentiality

**We are concerned about the potential for people to be in an environment that may not be safe for them to talk to us.**

(KEVIN, M, SPECIALIST, QLD)

could be better supported through professional practice with scheduled healthcare reminders and appointments.

Echoing patient comments in previous chapters, some healthcare practitioners speculated that telehealth consultations might create more private and comfortable healthcare encounters for some patients who may have concerns about stigma:

*I think it's made a big difference to some of our patients. They've enjoyed almost a level of anonymity. Yes, you know my name and you know that I'm being treated, but you don't know what I look like, and I don't know what you look like, kind of thing. [laughs] I had a fairly lengthy discussion with a gentleman the other day who was like, 'Now this has been great because, you know, I've got rid of my hep C, but I haven't had to try ... like, I haven't felt ashamed'. He was saying, like, having to have eye contact with somebody and explain how he's got hep C and stuff has always been a difficult conversation for him, but he found it much easier to disclose things and just be open about it. Yeah, just having that level of anonymity. He said he wasn't sure if he [had] had to go on camera, whether he would've felt quite as comfortable. (Rachel, F, nurse, Vic)*

Telehealth was also thought to be helpful for people for whom stigma and discrimination are barriers to accessing treatment:

*Yeah, just they're not worrying about getting stigma and discrimination and walking into a waiting room [...] you know, people just judge them. They don't get any of that, they don't have to sit in a waiting room. (Naomi, F, harm reduction worker, Qld)*

*That's where the phone's actually been wonderful, because that's why a lot of people never attend for hep C treatment, they just don't want to sit in the waiting room with, you know, feeling like they're being judged or with other people who might have hep C. So, telephone, is a huge benefit in getting past that as well. (Martin, M, specialist, Vic)*

## The ongoing value of face-to-face appointments

Like patient participants, healthcare practitioners also reflected that telehealth was not optimal for all treatment purposes. Some practitioners, such as Belinda (F, nurse, NSW) and Ian (M, specialist, Vic), expressed a sense of uneasiness about not being able to conduct physical examinations, and the likelihood of 'missing things' as a result:

*So, patients with advanced liver disease, it's definitely not okay to do the phone consultations, because you really need to see what they're like physically. (Belinda, F, nurse, NSW)*

*There's a lot [...] you do have to kind of trust others a bit more, because you haven't got that sort of safety net of the person in the room with you. (Ian, M, specialist, Vic)*

Practitioners often spoke about using intuition to figure out when a patient might be experiencing a more complex health condition:

*I had a gut feeling that something wasn't right, just from the conversations we were having. He wasn't able to really elaborate or really like hone down on his signs and symptoms and really explain his situation to me. (Rachel, F, nurse, Vic)*

Concerns were also expressed that because of COVID-19, people may not be accessing the usual testing or subject to the opportunistic screening and testing they would normally be offered in alcohol and other drug treatment or medical settings.


## Conclusion

Most of the healthcare practitioners we interviewed expressed concerns about the accessibility of telehealth for patients, especially where financial resources are limited and mobile phones, internet reception and digital literacy cannot be taken for granted. While video telehealth was valued, demands on patients to have the requisite technology, confidence and resources meant it was less reliable and effective for healthcare

practitioners. While noting that in most cases hepatitis C required fairly simple consultations, healthcare practitioners also said they valued face-to-face consultations in case they missed other important health issues and concerns. Overall, like patient participants, they highlighted the importance of flexibility and accessibility, and to the extent that telehealth increases people's access to healthcare and the kind of healthcare they want, they were supportive of its continuation. Overall, many said that telehealth should be continued, but should be one option among several and certainly not the only option.

## Key recommendations based on these findings are:

- **Recommendation 14:** While videoconference services are the Australian Government's preferred approach for telehealth, and should be used where appropriate or preferred, use of videoconferencing should not be a requirement for Medicare billing, as this would create an impediment to delivering treatment for hepatitis C.
- **Recommendation 15:** The temporary MBS telehealth items made available during the COVID-19 pandemic to nurse practitioners, GPs and other medical professionals involved in hepatitis C treatment should be made permanent to enhance access to hepatitis C treatment.



# Conclusion: Improving telehealth for hepatitis C care and treatment delivery

**This report presents research findings from an Australian Government Department of Health-funded study on telehealth care and treatment delivery for hepatitis C.**

The study sought to better understand patients' and healthcare providers' experiences of using telehealth for hepatitis C care delivery during the COVID-19 pandemic, and how the uptake and expansion of telehealth for hepatitis C treatment might be improved. The study has been designed to support the ongoing implementation and refinement of the Fifth National Hepatitis C Strategy. The strategy identifies 'access and

equity' as a guiding principle necessary to 'support a high-quality, evidence-based and equitable response to hepatitis C', as well as a priority area for action. This research supports the development of more equitable access to treatment by generating new knowledge on the use of telehealth to expand hepatitis C care delivery to marginalised or stigmatised groups and hard-to-reach settings.



The study found COVID-19 negatively affected patient participants' access to healthcare and exacerbated existing inequalities, such as housing instability and employment precarity. COVID-related restrictions (such as staying at home and physical distancing) increased feelings of marginalisation, social isolation and poor mental health. For some of the patient participants who injected drugs, COVID-19 compounded existing experiences of stigmatisation and criminalisation. In this context, and despite being introduced quickly, many patients found telehealth convenient and appealing, especially when managing the potential risk of COVID-19 transmission.

Overall, telehealth was seen by patients as improving their access to treatment and being a convenient mode of healthcare delivery. While many described hepatitis C treatment via telehealth as straightforward and convenient, many also spoke about the practical arrangements they undertook to accommodate telehealth appointments in their everyday lives, including learning new technologies, managing unreliable mobile coverage and internet connections, and fitting in telehealth appointments – particularly when they were not reliably scheduled – with work and social commitments. For those people with multiple or more complex health needs, telehealth was not a substitute for face-to-face appointments.

Significantly, patients who had had a pre-existing relationship with their hepatitis C treatment provider tended to have more positive experiences of treatment. They described more trusting, communicative and caring treatment experiences. That said, previous experiences of healthcare, including stigmatising encounters, also tended to shape people's expectations of healthcare encounters and their preferences around communication and follow-up. For some, telehealth was appealing because it reduced the potential for encountering stigma and judgmental attitudes in healthcare.

The fit of telehealth with existing communication infrastructure is a key issue for both participant groups. For healthcare practitioners, the

implementation of telehealth modes and models of care varied greatly in different professional contexts depending on existing infrastructure, organisational support, the efforts of individual healthcare practitioners and access to Medicare rebates. Implementing telehealth necessitated new and sometimes onerous forms of administration, which individual healthcare practitioners often had to manage with little organisational oversight and support. While healthcare practitioners experienced this 'poor fit' in increased administrative load, patient participants felt these discrepancies through delays, and lost referrals and prescriptions. In a time of rapid and dramatic alterations to personal security and mobility, the fit of telehealth with existing and new infrastructures and technologies emerges as a key area for improvement.

While both groups saw telehealth as improving access to hepatitis C treatment, issues of accessibility were not straightforward. Healthcare practitioners thought video telehealth was valuable for people with more complex health concerns, but lack of organisational preparedness and limited support meant it was not always easy to access or reliable to use. This affected patients' choice of healthcare modality, with phone delivery models of telehealth often operating as the default option, regardless of practitioner or patient preference. Mirroring what patient participants said, practitioners noted that uptake of video telehealth is also contingent upon providing additional support to patients who may have lower levels of digital literacy, and who may face financial and other material constraints.

Both groups agreed that telehealth had the potential to lessen stigma, by removing the need for patients to enter into what could be experienced as judgemental or stigmatising healthcare environments. However, the impartial nature of telehealth, and its capacity for briefer interventions, may sometimes lead to less communicative or caring healthcare encounters. For hepatitis C treatment, informed and caring healthcare consultations were valued

by patient participants, and helped ameliorate the isolation of COVID-19 and previous negative experiences. While healthcare practitioners were widely concerned about privacy and confidentiality in telehealth consultations, patient participants reported that unscheduled healthcare reminders and phone calls were common, which complicated their ability to manage confidentiality. While some patient participants said they did not mind unscheduled 'check-ins', and sometimes felt cared for when contacted, telehealth and phone consultations would be improved by being planned in advance so patients could better manage privacy and confidentiality, and to improve the quality of the telehealth encounter.

**Below we outline recommendations from these findings for supporting and improving telehealth for people accessing hepatitis C treatment, including improvements to implementation and to supporting the hepatitis C sector to optimise the use of telehealth where effective and valuable.**

## Enhancing telehealth accessibility and engagement

- 1. Efforts to improve telehealth accessibility and reduce patient exposure to and experience of stigma should involve peer advocates and harm reduction workers in the design and delivery of models of care and telehealth services.** The involvement of peer workers and adoption of peer-led approaches has been shown to add value to existing models of care and to improve pathways and support for people across the treatment pathway (Henderson et al., 2017; Treloar et al., 2015).
- 2. Efforts to help patients engage in telehealth for hepatitis C treatment should be strengthened through additional messaging and health promotion by government and peak sector bodies to advertise its availability and explain its features and processes.** While it is difficult to draw conclusions about the level of knowledge of telehealth among

people living with hepatitis C, most patient participants in this study found out about the availability of telehealth modes of care delivery once they initiated treatment, and they had not been previously informed about the option. This supports recent research showing that part of the slow and fragmented uptake of telehealth prior to COVID-19 was due to limited public awareness about the availability and benefits of telehealth (Bradford et al., 2015). Given that many people described using telehealth for hepatitis C treatment as convenient and relatively straightforward, its availability needs to be more known and disseminated more broadly.

3. **Healthcare practitioners working in the hepatitis C sector should consider engaging in clear and informed discussions with people accessing hepatitis C treatment about the availability of telehealth modes of service delivery.** Efforts to alert people about the availability of telehealth modes of service delivery could also be improved by providing information about telehealth availability when screening and testing, and prior to initiating treatment. Preferences for telehealth modes of healthcare over face-to-face treatment may mean more people proactively seek out hepatitis C treatment.

## Ensuring flexible modes of telehealth service delivery and support

4. **Healthcare practitioners should schedule and plan follow-up consultations in advance (except where patients specifically agree to, or prefer, spontaneous contact) so they can better manage privacy and confidentiality, and to improve the quality of the telehealth encounter.** While patient participants valued the convenience of phone and text messages for appointment reminders and some consultations, they also reported receiving unscheduled phone calls. While this was experienced by some participants as caring and considerate,

unplanned healthcare conversations compromised patient confidentiality, which was also a key concern of healthcare practitioners.

5. **Healthcare practitioners should consult with patients about their preferred method of communication and avoid using the postal system for reminders, prescriptions and referrals unless absolutely necessary.** The postal system was seen as unreliable during COVID-19, leading to delays and long waiting times for prescriptions and referrals. Patient participants valued the convenience of having referrals, pathology forms and prescriptions sent to other health services on their behalf. Waiting on the postal system for referrals and descriptions had the potential to delay treatment and cause worry among patients. More substantive changes to current procedures and infrastructure around prescribing may be required, because electronic communication and prescription systems differ between general practice, pharmacies and other health services.
6. **Where video telehealth is supported, preferred and would be an advantage, organisations should consider offering patients an initial appointment with a specialist worker to support them in setting up and using telehealth videoconferencing.** While many patient participants preferred phone telehealth, often this was the result of limited confidence in managing video technology. Support and training for patients around video telehealth would improve their confidence and digital literacy. Outside pandemic situations, patients should be given the option of an initial face-to-face appointment with a dedicated worker or 'telehealth coordinator' (Nazareth et al., 2013), where information about treatment and telehealth technologies is provided, as well as assistance in acquiring and downloading appropriate conferencing software. The accessibility of video telehealth would be improved through additional support for patients who have lower levels of confidence and digital literacy.

7. **Services that support target patient groups should be funded to set up video telehealth hubs and/or infrastructure for telehealth appointments for existing clients.** As Schulz et al. (2020) argue, while early telehealth programs required high-cost standalone systems that needed significant investment and had significant costs for ongoing maintenance, the COVID-19 pandemic has precipitated the rapid adoption of video technologies and telehealth in the general public. Dedicated telehealth hubs or infrastructures would improve patient experiences of streamlined care and ensure ongoing choice and flexibility throughout treatment.

## Optimising the use of telehealth for hepatitis C treatment

8. **A telehealth care model for hepatitis C treatment should be embedded, wherever possible, in pre-existing healthcare relationships to support trust, communication and a positive experience of healthcare for patients.** While several quantitative studies have found that healthcare practitioners describe telehealth as providing the same quality of care as an in-person appointment (Schulz et al., 2020), according to our findings, the most successful modes of telehealth delivery were when people had existing relationships with healthcare providers and had established trust. This supports a recent study of Australian general practice patients, who found telehealth convenient but that an existing doctor-patient relationship was important for telehealth services to be effective (Javanparast et al., 2021).
9. **In the absence of a pre-existing relationship between the hepatitis C treatment provider and patient, or an initial face-to-face appointment, MBS telephone items should support longer consultation times to improve patients' comfort, engagement and understanding of treatment.** Negative experiences of hepatitis C treatment via telehealth occurred

when patients were not aware whom they were speaking to, not given opportunities to ask questions and raise other healthcare concerns, or not supported with new technologies. Initial appointments should be designed to ensure patients have enough time to become familiar with healthcare practitioners and are comfortable with the process of treatment. This may include discussion of privacy and consent, and what they will be asked to discuss and disclose in regular appointments.

- 10. Healthcare services and organisations should oversee and resource the set-up and management of telehealth infrastructure and technologies to avoid placing the burden of change primarily on individual staff members.** The scale-up of telehealth programs in particular organisations tended to be led by staff members who took responsibility for implementing the appropriate technologies and infrastructure. However, relying on telehealth ‘champions’ (Bardosh et al., 2017; Mashru et al., 2017) can place an additional burden on time and resources, and also threaten the sustainability of telehealth programs.
- 11. Given the greater involvement of pharmacists in information provision about hepatitis C treatment and medication regimes, future targeted education activities and hepatitis C training should address and include pharmacists.** While the role of pharmacists in increasing access to hepatitis C care and achieving the World Health Organization 2030 elimination goals has long been acknowledged (Wade, 2020), their role in hepatitis C models of care has been limited. It has been found that people with hepatitis C are receptive to community pharmacy models for HCV treatment but also reported mixed experiences dealing with pharmacists (Tsui et al., 2021). The Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM) or the Victorian

HIV and Hepatitis Integrated Training and Learning (VHHITAL) program in Victoria should consider targeting education and training on hepatitis C treatment and stigma for community pharmacists.

- 12. Further research is required on the effect of telehealth on healthcare practitioner time management and administration, in order to identify potential additional support needs.** Recent research suggests that telehealth does not demonstrate a cost saving over in-person care, due to the increased costs related to administration, resourcing and non-billable activity (Kippen et al., 2020; Snoswell et al., 2020). Research has also shown that Australian healthcare workers needed more administrative and technological support during COVID-19 (Taylor et al., 2021). While this study has identified some of the support needs and concerns of healthcare practitioners using telehealth, more detailed research across different healthcare settings is needed.
- 13. Organisations should provide training and support to healthcare practitioners delivering hepatitis C treatment and care through phone consultations, to assist them to better respond to and manage non-verbal cues and silences.** Previous research has identified that a challenge with telephone-based healthcare services is that healthcare practitioners must rely on auditory rather than visual cues to diagnose and treat patients (Oudshoorn, 2009). Healthcare practitioners would benefit from targeted training and support to develop skills and competencies to make sense of auditory encounters in telehealth services.
- 14. While videoconference services are the Australian Government’s preferred approach for telehealth, and should be used where appropriate or preferred, use of videoconferencing should not be a requirement for Medicare billing, as this would create an impediment to delivering treatment for hepatitis C.** This study found that patient

participants valued the flexibility of telehealth modalities, with some preferring phone consultations due to their perceived anonymity. Participants from both groups also expressed concerns about digital literacy. While support for video telehealth is needed, phone telehealth is necessary for those less confident with new technologies.

- 15. The temporary MBS telehealth items made available to nurse practitioners, GPs and other medical professionals involved in hepatitis C treatment to reduce the risk of community transmission of COVID-19 should be made permanent to enhance access to hepatitis C treatment.**

# References

- Aicken, C. R. H., Sutcliffe, L. J., Gibbs, J., Tickle, L. J., Hone, K., Harding-Esch, E. M., Mercer, C. H., Sonnenberg, P., Sadiq, S. T., Estcourt, C. S., & Shahmanesh, M. (2018). Using the eSexual Health Clinic to access chlamydia treatment and care via the internet: A qualitative interview study. *Sexually Transmitted Infections*, 94(4), 241-247. <https://doi.org/10.1136/sextrans-2017-053227>
- Amukotuwa, S. A., Bammer, R., & Maingard, J. (2020). Where have our patients gone? The impact of COVID-19 on stroke imaging and intervention at an Australian stroke centre. *Journal of Medical Imaging and Radiation Oncology*, 64(5), 607-614. <https://doi.org/10.1111/1754-9485.13093>
- Anderson, K., Francis, T., Ibanez-Carrasco, F., & Globberman, J. (2017). Physician's perceptions of telemedicine in HIV care provision: A cross-sectional web-based survey. *JMIR Public Health and Surveillance*, 3(2), e31. <https://doi.org/10.2196/publichealth.6896>
- Bardosh, K. L., Murray, M., Khaemba, A. M., Smillie, K., & Lester, R. (2017). Operationalizing mHealth to improve patient care: A qualitative implementation science evaluation of the WeTel texting intervention in Canada and Kenya. *Globalization and Health*, 13(1), 87. <https://doi.org/10.1186/s12992-017-0311-z>
- Beaulac, J., Balfour, L., Corace, K., Kaluzienski, M., & Cooper, C. (2019). Access and preferences for mobile technology among diverse hepatitis C patients: Implications for expanding treatment care. *Journal of Mobile Technology in Medicine*, 8(1), 11-19. <https://doi.org/10.7309/jmtm.8.1.2>
- Bensted, K., Kim, C., Freiman, J., Hall, M., & Zekry, A. (2021). Gastroenterology hospital outpatients report high rates of satisfaction with a Telehealth model of care. *Journal of Gastroenterology and Hepatology*, 1-6. <https://doi.org/10.1111/jgh.15663>
- Bissessor, M., Bradshaw, C. S., Fairley, C. K., Chen, M. Y., & Chow, E. P. F. (2017). Provision of HIV test results by telephone is both safe and efficient for men who have sex with men. *International Journal of STD & AIDS*, 28(1), 39-44. <https://doi.org/10.1177/0956462415623912>
- Bradford, N. K., Caffery, L. J., & Smith, A. C. (2015). Awareness, experiences and perceptions of telehealth in a rural Queensland community. *BMC Health Services Research*, 15(1), 427. <https://doi.org/10.1186/s12913-015-1094-7>
- Bradford, N., Caffery, L. & Smith, A. (2016). Telehealth services in rural and remote Australia: A systematic review of models of care and factors influencing success and sustainability. *Rural and Remote Health*, 16(4), 1-23. <https://doi.org/10.22605/RRH3808>
- Cheng, W., Nazareth, S., & Flexman, J. P. (2015). Statewide hepatitis C model of care for rural and remote regions. *Journal of Gastroenterology and Hepatology*, 30, 1-5. <https://doi.org/10.1111/jgh.12863>
- Cooper, C. L., Hatashita, H., Corsi, D. J., Parmar, P., Corrin, R., & Garber, G. (2017). Direct-acting antiviral therapy outcomes in Canadian chronic hepatitis C telemedicine patients. *Annals of Hepatology*, 16(6), 874-880. <https://doi.org/10.5604/01.3001.0010.5277>
- Day, S., Kinsella, R., Jones, S., Tittle, V., Suchak, T., & Forbes, K. (2020). Safeguarding outcomes of 16 and 17-year-old service users of Sexual Health London (SHL.uk), a pan-London online sexual health service. *International Journal of STD & AIDS*, 31(14), 1373-1379. <https://doi.org/10.1177/0956462420933462>
- Department of Health. (2018). *Fifth National Hepatitis C Strategy 2018-2022*. Canberra: Commonwealth of Australia.
- Dilkes-Frayne, E., Savic, M., Carter, A., Kokanovic, R., & Lubman, D. I. (2019). Going online: The affordances of online counseling for families affected by alcohol and other drug issues. *Qualitative Health Research*, 29(14), 2010-2022. <https://doi.org/10.1177/1049732319838231>
- Estcourt, C. S., Gibbs, J., Sutcliffe, L. J., Gkatzidou, V., Tickle, L., Hone, K., Aicken, C., Lowndes, C. M., Harding-Esch, E. M., Eaton, S., Oakeshott, P., Szczepura, A., Ashcroft, R. E., Copas, A., Nettleship, A., Sadiq, S. T., & Sonnenberg, P. (2017). The eSexual Health Clinic system for management, prevention, and control of sexually transmitted infections: Exploratory studies in people testing for Chlamydia trachomatis. *Lancet Public Health*, 2(4), e182-e190. [https://doi.org/10.1016/s2468-2667\(17\)30034-8](https://doi.org/10.1016/s2468-2667(17)30034-8)
- Farrugia, A., Fraser, S., Edwards, M., Madden, A. & Hocking, S. (2019). *Lived experiences of stigma and discrimination among people accessing South Western Sydney Local Health District Drug Health Services*. The Australian Research Centre in Sex, Health and Society, La Trobe University.
- Fraser, S., Moore, D., Farrugia, A., Edwards, M., & Madden, A. (2020). Exclusion and hospitality: The subtle dynamics of stigma in healthcare access for people emerging from alcohol and other drug treatment. *Sociology of Health & Illness*, 42(8), 1801-1820. <https://doi.org/10.1111/1467-9566.13180>
- Halder, A., Li, V., Sebastian, M., Nazareth, S., Tuma, R., Cheng, W., & Doyle, A. (2021). Use of telehealth to increase treatment access for prisoners with chronic hepatitis C. *Internal Medicine Journal*, 51(8), 1344-1347. <https://doi.org/10.1111/imj.15451>
- Harris, M., & Rhodes, T. (2013). Hepatitis C treatment access and uptake for people who inject drugs: A review mapping the role of social factors. *Harm Reduction Journal*, 10(1), 1-11. <https://doi.org/10.1186/1477-7517-10-7>
- Henderson, C., Madden, A., & Kelsall, J. (2017). 'Beyond the willing & the waiting' — The role of peer-based approaches in hepatitis C diagnosis & treatment. *International Journal of Drug Policy*, 50, 111-115. <https://doi.org/10.1016/j.drugpo.2017.08.004>
- Hew, A., Arunogiri, S., & Lubman, D. I. (2021). Challenges in delivering telemedicine to vulnerable populations: Experiences of an addiction medical service during COVID-19. *Medical Journal of Australia*, 215(5), 237. <https://doi.org/10.5694/mja2.51213>



- Horwood, J., Brangan, E., Manley, P., Horner, P., Muir, P., North, P., & Macleod, J. (2020). Management of chlamydia and gonorrhoea infections diagnosed in primary care using a centralised nurse-led telephone-based service: Mixed methods evaluation. *BMC Family Practice*, 21(1), 265. <https://doi.org/10.1186/s12875-020-01329-0>
- Javanparast, S., Roeger, L., Kwok, Y., & Reed, R. L. (2021). The experience of Australian general practice patients at high risk of poor health outcomes with telehealth during the COVID-19 pandemic: A qualitative study. *BMC Family Practice*, 22(1), 69. <https://doi.org/10.1186/s12875-021-01408-w>
- Jongbloed, K., Friedman, A. J., Pearce, M. E., Van Der Kop, M. L., Thomas, V., Demerais, L., Pooyak, S., Schechter, M. T., Lester, R. T., Spittal, P. M., & The Cedar Project Partnership. (2016). The Cedar Project WeTel mHealth intervention for HIV prevention in young Indigenous people who use illicit drugs: Study protocol for a randomized controlled trial. *Trials*, 17(1), 128. <https://doi.org/10.1186/s13063-016-1250-3>
- Jongbloed, K., Pearce, M. E., Thomas, V., Sharma, R., Pooyak, S., Demerais, L., Lester, R. T., Schechter, M. T., Spittal, P. M., & The Cedar Project Partnership. (2020). The Cedar Project - mobile phone use and acceptability of mobile health among young Indigenous people who have used drugs in British Columbia, Canada: Mixed methods exploratory study. *JMIR mHealth and uHealth*, 8(7), e16783. <https://doi.org/10.2196/16783>
- Keogh, K., Clark, P., Valery, P. C., McPhail, S. M., Bradshaw, C., Day, M., & Smith, A. C. (2016). Use of telehealth to treat and manage chronic viral hepatitis in regional Queensland. *Journal of Telemedicine and Telecare*, 22(8), 459-464. <https://doi.org/10.1177/1357633X16673794>
- Khan, I., Ndubuka, N., Stewart, K., McKinney, V., & Mendez, I. (2017). The use of technology to improve health care to Saskatchewan's First Nations communities. *Canada Communicable Disease Report*, 43(6), 120-124. <https://doi.org/10.14745/ccdr.v43i06a01>
- Kippen, R., O'Sullivan, B., Hickson, H., Leach, M., & Wallace, G. (2020). A national survey of COVID-19 challenges, responses and effects in Australian general practice. *Australian Journal of General Practice*, 49(11), 745-751. <https://doi.org/10.31128/AJGP-06-20-5465>
- Knight, V., Nugent, C., Houghton, R., O'Reilly, K., Scally, E., & Lu, H. (2019). An automated, electronic, client-centred results delivery system saves time and improves workflow. *Sexual Health*, 16(1), 88-89. <https://doi.org/10.1071/sh18100>
- Liu, N., Huang, R., Baldacchino, T., Sud, A., Sud, K., Khadra, M., & Kim, J. (2020). Telehealth for noncritical patients with chronic diseases during the COVID-19 pandemic. *Journal of Medical Internet Research*, 22(8), e19493. <https://doi.org/10.2196/19493>
- Lloyd, C. (2013). The stigmatization of problem drug users: A narrative literature review. *Drugs: Education, Prevention and Policy*, 20(2), 85-95. <https://doi.org/10.3109/09687637.2012.743506>
- Lobo, R., Mascarenhas, L., Worthington, D., Bevan, J., & Mak, D. B. (2015). Evaluation of the regional nurse-supported hepatitis C shared care program in Western Australia: A mixed methods study. *BMC Health Services Research*, 15, 399. <https://doi.org/10.1186/s12913-015-1055-1>
- Madden, A., Hopwood, M., Neale, J., & Treloar, C. (2018). Beyond interferon side effects: What residual barriers exist to DAA hepatitis C treatment for people who inject drugs? *PLoS ONE*, 13(11), e0207226. <https://doi.org/10.1371/journal.pone.0207226>
- Marent, B., Henwood, F., & the EmERGE Consortium. (2021). Platform encounters: A study of digitised patient follow-up in HIV care. *Sociology of Health & Illness*, 43(5), 1117-1135. <https://doi.org/10.1111/1467-9566.13274>
- Mashru, J., Kirlaw, M., Saginur, R., & Schreiber, Y. S. (2017). Management of infectious diseases in remote northwestern Ontario with telemedicine videoconference consultations. *Journal of Telemedicine and Telecare*, 23(1), 83-87. <https://doi.org/10.1177/1357633X15625136>
- McCulloch, H., Syred, J., Holdsworth, G., Howroyd, C., Ardines, E., & Baraitser, P. (2020). Communication strategies used to obtain clinical histories before remotely prescribing antibiotics for postal treatment of uncomplicated genital chlamydia: service evaluation. *Journal of Medical Internet Research*, 22(6), e15970. <https://doi.org/10.2196/15970>
- Mina, M. M., Herawati, L., Butler, T., & Lloyd, A. (2016). Hepatitis C in Australian prisons: A national needs assessment. *International Journal of Prisoner Health*, 12(1), 3-16. <https://doi.org/10.1108/IJPH-08-2015-0025>
- Naghdi, R., Seto, K., Klassen, C., Emokpare, D., Conway, B., Kelley, M., Yoshida, E., & Shah, H. A. (2017). A hepatitis C educational needs assessment of Canadian healthcare providers. *Canadian Journal of Gastroenterology and Hepatology*, 2017, 1-10. <https://doi.org/10.1155/2017/5324290>
- Nazareth, S., Kontorinis, N., Muwanwella, N., Hamilton, A., Leembruggen, N., & Cheng, W. S. (2013). Successful treatment of patients with hepatitis C in rural and remote Western Australia via telehealth. *Journal of Telemedicine and Telecare*, 19(2), 101-106. <https://doi.org/10.1258/jtt.2012.120612>
- Neuhaus, M., Langbecker, D., Caffery, L. J., Taylor, M., Garner, L., Williams, G., Smith, A. C., & Macdonald, G. A. (2018). Telementoring for hepatitis C treatment in correctional facilities. *Journal of Telemedicine and Telecare*, 24(10), 690-696. <https://doi.org/10.1177/1357633X18795361>
- Newby, J. M., O'Moore, K., Tang, S., Christensen, H., & Faasse, K. (2020). Acute mental health responses during the COVID-19 pandemic in Australia. *PLoS ONE*, 15(7), e0236562. <https://doi.org/10.1371/journal.pone.0236562>
- Oudshoorn, N. (2009). Physical and digital proximity: Emerging ways of health care in face-to-face and



telemonitoring of heart-failure patients. *Sociology of Health & Illness*, 31(3), 390-405. <https://doi.org/10.1111/j.1467-9566.2008.01141.x>

Papaluca, T., McDonald, L., Craigie, A., Gibson, A., Desmond, P., Wong, D., Winter, R., Scott, N., Howell, J., Doyle, J., Pedrana, A., Lloyd, A., Stooze, M., Hellard, M., Iser, D., & Thompson, A. (2019). Outcomes of treatment for hepatitis C in prisoners using a nurse-led, statewide model of care. *Journal of Hepatology*, 70(5), 839-846. <https://doi.org/10.1016/j.jhep.2019.01.012>

Parfitt, E. C., Schwartz, I. S., & Laupland, K. B. (2020). Putting the cart before the horse: Development of a de novo clinical infectious diseases service. *Official Journal of the Association of Medical Microbiology and Infectious Disease Canada*, 5(2), 53-56. <https://doi.org/10.3138/jammi-2019-02-04>

Rodrigues, B., Parsons, N., Haridy, J., Bloom, S., Day, C., Haar, G., Nicol, A., & Sawhney, R. (2021). A nurse-led, telehealth-driven hepatitis C management initiative in regional Victoria: Cascade of care from referral to cure. *Journal of Telemedicine and Telecare*, 1-8. <https://doi.org/10.1177/1357633x211024108>

Rouleau, G., Richard, L., & Cote, J. (2016). VIH-TAVIE™ relational model of engagement: Creating meaningful connections to empower people living with HIV via a virtual nursing intervention. In W. Sermeus, P. M. Procter, & P. Weber (Eds.), *Nursing Informatics 2016: eHealth for All: Every Level Collaboration - From Project to Realization* (pp. 932-933). IOS Press. <https://ebooks.iospress.nl/volume/nursing-informatics-2016-ehealth-for-all-every-level-collaboration-from-project-to-realization>

Searby, A., & Burr, D. (2021). The impact of COVID-19 on alcohol and other drug nurses' provision of care: A qualitative descriptive study. *Journal of Clinical Nursing*, 30(11-12), 1730-1741. <https://doi.org/10.1111/jocn.15732>

Schulz, T. R., Kanhutu, K., Sasadeusz, J., Watkinson, S., & Biggs, B. A. (2017).

Telehealth for Hepatitis C Care in the DAA Era; Ensuring Everyone Can Access a Cure. *Open Forum Infectious Diseases*, 4(suppl\_1), S202-S203. <https://doi.org/10.1093/ofid/ofx163.393>

Schulz, T. R., Kanhutu, K., Sasadeusz, J., Watkinson, S., & Biggs, B. A. (2020). Using telehealth to improve access to hepatitis C treatment in the direct-acting antiviral therapy era. *Journal of Telemedicine and Telecare*, 26(3), 180-185. <https://doi.org/10.1177/1357633X18806651>

Snoswell, C. L., Taylor, M. L., Comans, T. A., Smith, A. C., Gray, L. C., & Caffery, L. J. (2020). Determining if telehealth can reduce health system costs: Scoping Review. *Journal of Medical Internet Research*, 22(10), e17298. <https://doi.org/10.2196/17298>

Taylor, A., Caffery, L. J., Gesesew, H. A., King, A., Bassal, A.-R., Ford, K., Kealey, J., Maeder, A., McGuirk, M., Parkes, D., & Ward, P. R. (2021). How Australian health care services adapted to telehealth during the COVID-19 pandemic: A survey of telehealth professionals. *Frontiers in Public Health*, 9, 648009. <https://doi.org/10.3389/fpubh.2021.648009>

Taylor, M., Caffery, L. J., Scuffham, P. A., & Smith, A. C. (2018). Economic modelling of telehealth substitution of face-to-face specialist outpatient consultations for Queensland correctional facilities. *Australian Health Review*, 42(5), 522-528. <https://doi.org/10.1071/AH17135>

Thomson-Glover, R., Hamlett, H., Weston, D., & Ashby, J. (2020). Coronavirus (COVID-19) and young people's sexual health. *Sexually Transmitted Infections*, 96(7), 473-474. <https://doi.org/10.1136/sextrans-2020-054699> Tofighi, B., Hein, P., Carvalho, A. M. S., Lee, J. D., & Leonard, N. R. (2018). Technology preferences to enhance HIV and HCV care among patients with substance use disorders. *Journal of Addictive Diseases*, 37(3-4), 157-159. <https://doi.org/10.1080/10550887.2019.1640056>

Treloar, C., Rance, J., Bath, N., Everingham, H., Micallef, M., Day, C., Hazelwood, S., Grebely, J., & Dore, G. J.

(2015). Evaluation of two community-controlled peer support services for assessment and treatment of hepatitis C virus infection in opioid substitution treatment clinics: The ETHOS study, Australia. *International Journal of Drug Policy*, 26(10), 992-998. <https://doi.org/10.1016/j.drugpo.2015.01.005>

Tsui, J. I., Barry, M. P., Austin, E. J., Sweek, E. W., Tung, E., Hansen, R. N., Ninburg, M., Scott, J. D., Glick, S. N., & Williams, E. C. (2021). 'Treat my whole person, not just my condition': Qualitative explorations of hepatitis C care delivery preferences among people who inject drugs. *Addiction Science & Clinical Practice*, 16(1), 52. <https://doi.org/10.1186/s13722-021-00260-8>

Wade, A. J. (2020). Can community pharmacists treat hepatitis C virus? *The Lancet Gastroenterology and Hepatology*, 5(9), 790-791. [https://doi.org/10.1016/S2468-1253\(20\)30184-9](https://doi.org/10.1016/S2468-1253(20)30184-9)

Wade, A. J., Veronese, V., Hellard, M. E., & Doyle, J. S. (2016). A systematic review of community based hepatitis C treatment. *BMC Infectious Diseases*, 16, 1-8. <https://doi.org/10.1186/s12879-016-1548-5>

Zhou, C., Crawford, A., Serhal, E., Kurdyak, P., & Sockalingam, S. (2016). The impact of project ECHO on participant and patient outcomes: A systematic review. *Academic Medicine*, 91(10), 1439-1461. <https://doi.org/10.1097/acm.0000000000001328>

# Appendix 1:

## Table of patient participants

Patient participants	n=15
<b>Location</b>	
Urban	12
Regional	3
<b>State</b>	
Victoria	7
New South Wales	3
Queensland	5
<b>Gender</b>	
Female	5
Male	10
<b>Sexuality</b>	
Heterosexual	12
Homosexual	1
Bisexual	2
<b>Cultural and ethnic background</b>	
Australian	12
Southern and East African	1
Southern and Eastern European	1
Southern and Central Asian	1
<b>Telehealth setting</b>	
Community	4
Tertiary hospital	8
Nurse-led clinic	2
Alcohol and other drug service	1

\* Reporting of cultural and ethnic background follows the Australian Standard Classification of Cultural and Ethnic Groups, developed by the Australian Bureau of Statistics. Cultural and ethnic background was classified according to a combination of self-reported group identification with particular cultural or ethnic groups, the participant's birthplace and their parents' birthplaces.

# Appendix 2:

## Table of healthcare practitioner participants

Healthcare practitioner participants	n=25
<b>Service type</b>	
General practitioner	5
Hepatologist, gastroenterologist or infectious diseases specialist	8
Nurse	8
Other	4
<b>State</b>	
Victoria	9
New South Wales	8
Queensland	8
<b>Location</b>	
Urban	14
Regional	11

# Appendix 3:

## Patient participant information sheet and consent form

The research is being carried out by the following researchers:

Role	Name	Organisation
Principal Investigator	Professor Suzanne Fraser	La Trobe University
Co-Investigator	Dr Renae Fomiatti	La Trobe University
Research Officer	Dr Frances Shaw	La Trobe University
Research Assistant	Andrew Whalley	La Trobe University
Research funder	Commonwealth Department of Health	

### 1. What is the study about?

You are invited to participate in a study of telehealth care delivery for hepatitis C during the COVID-19 pandemic. We hope to learn about the experiences of people living with hepatitis C using telehealth for hepatitis C care delivery during the COVID-19 pandemic to improve hepatitis C care delivery and treatment in the future. You are invited to take part on the basis of your personal experience of hepatitis C and telehealth care delivery for hepatitis C during the COVID-19 pandemic.

### 2. Do I have to participate?

Being part of this study is voluntary. If you want to be part of the study we ask that you read the information below carefully and ask us any questions.

You can read the information below and decide at the end if you do not want to participate. If you decide not to participate this won't affect your relationship with La Trobe University, your employer, clinic/doctor, or any other organisation.

### 3. Who is being asked to participate?

You are invited to take part on the basis of your personal experience of hepatitis C and telehealth care delivery for hepatitis C during the COVID-19 pandemic.

### 4. What will I be asked to do?

If you decide to participate in this research, you must give us your 'consent'. This means that you have freely chosen to be involved and that you give us your permission to interview you. You may have a support person (e.g. family member) assist you with this process if you wish. If you choose to give us your consent and participate, you will take part in a semi-structured interview of about one hour's duration. You may also have a support person for the interview if you wish. The support person may assist with interpretation and translation, and should be fluent in English. The focus of the interview will be on your experience of using telehealth for hepatitis C care and

treatment, including any obstacles or barriers to treatment you may have experienced. If you are not comfortable answering any question you can refuse to do so. You can also withdraw from the interview at any time without any negative consequences.

If you do choose to participate you will be compensated \$50 to cover your time and any expenses involved in taking part.

### 5. What are the benefits?

Your participation will allow you the opportunity to express your opinions about hepatitis C and telehealth care delivery for hepatitis C treatment during the COVID-19 pandemic. The information generated in this project may be of use to you or others as an information resource about using telehealth for hepatitis C care and delivery.

### 6. What are the risks?

With any study there are (1) risks we know about, (2) risks we don't know about and (3) risks we don't expect. If you experience something that you aren't sure about, please contact us immediately so we can discuss the best way to manage your concerns.

Name/Organisation	Position	Telephone	Email
Professor Suzanne Fraser	Lead Investigator and Director, Australian Research Centre in Sex, Health and Society	(03) 9479 8813	<a href="mailto:s.fraser@latrobe.edu.au">s.fraser@latrobe.edu.au</a>

When reporting research findings we will refer to you by a false name so there is little risk that your identity will be discovered through the research reporting process.

Only the principal investigator and research team for this project will have access to the project's raw data. Other bona fide researchers approved by the principal investigator may be given access to the data, but only in its de-identified form.

Everything you say in the interview will be kept confidential. Any information gathered in the interview will be protected in order to protect your identity.

There is a risk that the interview may cause distress because of sensitive topics that may come up in conversation. If the interviewer observes any distress they will check to see if you would like to pause the interview or bring it to a close.

Any hard copy transcripts will be kept in a securely locked cabinet accessible only to the researchers. Audio recordings and electronic copies of transcripts will be kept in a password protected folder on a secure University computer. The material will be kept for seven years after the research has been published, and then destroyed.

## 7. How will risk of COVID-19 be managed?

The research includes steps to protect you and the interviewer from the risk of COVID-19 transmission. These steps are:

- The interviewer will contact you to ask COVID-19 screening questions 24 hours prior to the interview.
- The participant and interviewer will sanitise their hands before the interview.
- All interview equipment will be sanitised before and after each interview.
- 1.5 metres distance will be maintained between the participant and the interviewer.
- No physical contact between the participant and interviewer will occur.

These simple steps will ensure the safety of everyone involved in the research.

## 8. What will happen to information about me?

We will **collect** information about you in ways that **will** reveal who you are.

We will **store** information about you in ways that **will not** reveal who you are.

We will **publish** information about you in ways that **will not** be identified in any type of publication from this study.

We will **keep** your information for seven years after the project is completed. After this time we **will** destroy all of your data.

The storage, transfer and destruction of your data will be undertaken in accordance with the Research Data Management Policy <https://policies.latrobe.edu.au/document/view.php?id=106/>.

The personal information you provide will be handled in accordance with applicable privacy laws, any health information collected will be handled in accordance with the Health Records Act 2001 (Vic). Subject to any exceptions in relevant laws, you have the right to access and correct your personal information by contacting the research team.

## 9. Will I hear about the results of the study?

If you would like to receive the project report, we can record a preferred contact method such as your email address or phone number. We will arrange to send you a copy of the report once it is complete.

## 10. What if I change my mind?

You may withdraw your data at any time up to the point that your data has been used in articles or reports that have been submitted for publication. You can let us know by:

- Completing the 'Withdrawal of Consent Form' (provided at the end of this document);
- Calling us; or
- Emailing us

Your decision to withdraw at any point will not affect your relationship with La Trobe University or any other organisation listed.

When you withdraw we will stop asking you for information. Any identifiable information about you will be withdrawn from the research study. However, once the results have been analysed we can only withdraw information, such as your name and contact details. If results haven't been analysed you can choose if we use those results or not.

### 11. Who can I contact for questions or want more information?

If you would like to speak to us, please use the contact details below:

Name/Organisation	Position	Telephone	Email
Dr Renae Fomiatti	Research Officer		<a href="mailto:r.fomiatti@latrobe.edu.au">r.fomiatti@latrobe.edu.au</a>
Dr Frances Shaw	Research Officer	0431 483 918	<a href="mailto:f.shaw@latrobe.edu.au">f.shaw@latrobe.edu.au</a>

### 12. What if I have a complaint?

If you have a complaint about any part of this study, please contact:

Ethics Reference Number	Position	Telephone	Email
HEC2043	Senior Research Ethics Officer	+61 3 9479 1443	<a href="mailto:humanethics@latrobe.edu.au">humanethics@latrobe.edu.au</a>

## Consent Form – Declaration by Participant

I (the participant) have read (or, where appropriate, have had read to me) and understood the participant information statement, and any questions have been answered to my satisfaction. I agree to participate in the study, I know I can withdraw at any time until [four weeks] following the collection of my data. I agree information provided by me or with my permission during the project may be included in a thesis, presentation and published in journals on the condition that I cannot be identified.

☐ I agree to have my interview audio and/or video recorded

☐ I would like to receive a copy of the results via email or post. I have provided my details below and ask that they only be used for this purpose and not stored with my information or for future contact.

Name	Email (optional)	Postal address (optional)

### Participant Signature

☐ I have received a signed copy of the Participant Information Statement and Consent Form to keep

Participant's printed name \_\_\_\_\_

Participant's signature \_\_\_\_\_

Date \_\_\_\_\_

### Declaration by Researcher

☐ I have given a verbal explanation of the study, what it involves, and the risks and I believe the participant has understood;

☐ I am a person qualified to explain the study, the risks and answer questions

Researcher's printed name \_\_\_\_\_

Researcher's signature \_\_\_\_\_

Date \_\_\_\_\_

\* All parties must sign and date their own signature



### Withdrawal of Consent

I wish to withdraw my consent to participate in this study. I understand withdrawal will not affect my relationship with La Trobe University of any other organisation or professionals listed in the Participant Information Statement. I understand the researchers cannot withdraw my information once it has been published.

#### I understand my information will be withdrawn as outlined below:

- ✓ Any identifiable information about me will be withdrawn from the study
- ✓ The researchers will withdraw my contact details so I cannot be contacted by them for future studies unless I have given separate consent for my details to be kept in a participant registry.
- ✓ The researchers cannot withdraw my information once it has been analysed, and/or collected as part of a focus group

[Delete if inapplicable] \*\*if you have consented for your contact details to be included in a participant registry you will need to contact the registry staff directly to withdraw your details.

I would like my already collected and unanalysed data

- ☐ Destroyed and not used for any analysis
- ☐ Used for analysis

### Participant Signature

Participant's printed name \_\_\_\_\_

Participant's signature \_\_\_\_\_

Date \_\_\_\_\_

#### Please forward this form to:

CI Name	Dr Renae Fomiatti
Email	r.fomiatti@latrobe.edu.au
Phone	FORMTEXT
Postal Address	Australian Research Centre in Sex, Health and Society

# Appendix 4:

## Healthcare practitioner participant information sheet and consent form

The research is being carried out by the following researchers:

Role	Name	Organisation
Principal Investigator	Professor Suzanne Fraser	La Trobe University
Co-Investigator	Dr Renae Fomiatti	La Trobe University
Research Officer	Dr Frances Shaw	La Trobe University
Research Assistant	Andrew Whalley	La Trobe University
Research funder	Commonwealth Department of Health	

### 4. What is the study about?

You are invited to participate in a study of telehealth care delivery for hepatitis C during the COVID-19 pandemic. We hope to learn about the experiences of people living with hepatitis C using telehealth for hepatitis C care delivery during the COVID-19 pandemic to improve hepatitis C care delivery and treatment. You are invited to take part on the basis of your personal experience providing telehealth care delivery for hepatitis C during the COVID-19 pandemic.

### 5. Do I have to participate?

Being part of this study is voluntary. If you want to be part of the study we ask that you read the information below carefully and ask us any questions.

You can read the information below and decide at the end if you do not want to participate. If you decide not to participate this won't affect your relationship with La Trobe University, your employer, or any other organisation.

### 6. Who is being asked to participate?

You are invited to take part on the basis of your personal experience providing telehealth care delivery for hepatitis C during the COVID-19 pandemic.

### 7. What will I be asked to do?

If you decide to participate in this research, you must give us your 'consent'. This means that you have freely chosen to be involved and that you give us your permission to interview you. If you choose to give us your consent and participate, you will take part in a semi-structured interview of about one hour's duration. The focus of the interview will be on your experience using telehealth for hepatitis C care advice and delivery during the COVID-19 pandemic, and any obstacles or barriers you observed for sustaining or enhancing implementation, uptake, engagement and retention. If you are not comfortable answering any question you can refuse to do so. You can also

withdraw from the interview at any time without any negative consequences.

### 8. What are the benefits?

Your participation will allow you the opportunity to express your opinions about hepatitis C and telehealth care delivery for hepatitis C treatment during the COVID-19 pandemic. The information generated in this project may be of use to you or others as an information resource about using telehealth for hepatitis C care and delivery.

### 9. What are the risks?

With any study there are (1) risks we know about, (2) risks we don't know about and (3) risks we don't expect. If you experience something that you aren't sure about, please contact us immediately so we can discuss the best way to manage your concerns.

Name/Organisation	Position	Telephone	Email
<b>Professor Suzanne Fraser</b>	Lead Investigator and Director, Australian Research Centre in Sex, Health and Society	(03) 9479 8813	<a href="mailto:s.fraser@latrobe.edu.au">s.fraser@latrobe.edu.au</a>

When reporting research findings we will refer to you by a false name so there is little risk that your identity will be discovered through the research reporting process.

Only the principal investigator and research team for this project will have access to the project's raw data. Other bona fide researchers approved by the principal investigator may be given access to the data, but only in its de-identified form.

Everything you say in the interview will be kept confidential. Any information gathered in the interview will be protected in order to protect your identity.

Any hard copy transcripts will be kept in a securely locked cabinet accessible only to the researchers. Audio recordings and electronic copies of transcripts will be kept in a password protected folder on a secure University computer. The material will be kept for seven years after the research has been published, and then destroyed.

#### 10. What will happen to information about me?

We will **collect** information about you in ways that **will not** reveal who you are.

We will **store** information about you in ways that **will not** reveal who you are.

We will **publish** information about you in ways that **will not** be identified in any type of publication from this study.

We will **keep** your information for seven years after the project is completed. After this time we **will** destroy all of your data.

The storage, transfer and destruction of your data will be undertaken in accordance with the Research Data Management Policy <https://policies.latrobe.edu.au/document/view.php?id=106/>.

The personal information you provide will be handled in accordance with applicable privacy laws, any health information collected will be handled in accordance with the Health Records Act 2001 (Vic). Subject to any exceptions in relevant laws, you have the right to access and correct your personal information by contacting the research team.

#### 11. Will I hear about the results of the study?

If you would like to receive the project report, we can record a preferred contact method such as your email address or phone

number. We will arrange to send you a copy of the report once it is complete.

#### 12. What if I change my mind?

You can choose to no longer be part of the study at any time until [four weeks] following the collection of your data. You can let us know by:

1. Completing the 'Withdrawal of Consent Form' (provided at the end of this document);
2. Calling us; or
3. Emailing us

Your decision to withdraw at any point will not affect your relationship with La Trobe University or any other organisation listed.

When you withdraw we will stop asking you for information. Any identifiable information about you will be withdrawn from the research study. However, once the results have been analysed we can only withdraw information, such as your name and contact details. If results haven't been analysed you can choose if we use those results or not.

### 13. Who can I contact for questions or want more information?

If you would like to speak to us, please use the contact details below:

Name/Organisation	Position	Telephone	Email
Dr Renae Fomiatti	Research Officer		<a href="mailto:r.fomiatti@latrobe.edu.au">r.fomiatti@latrobe.edu.au</a>
Dr Frances Shaw	Research Officer	0431 483 918	<a href="mailto:f.shaw@latrobe.edu.au">f.shaw@latrobe.edu.au</a>

### 14. What if I have a complaint?

If you have a complaint about any part of this study, please contact:

Ethics Reference Number	Position	Telephone	Email
HEC2043	Senior Research Ethics Officer	+61 3 9479 1443	<a href="mailto:humanethics@latrobe.edu.au">humanethics@latrobe.edu.au</a>

## Consent Form – Declaration by Participant

I (the participant) have read (or, where appropriate, have had read to me) and understood the participant information statement, and any questions have been answered to my satisfaction. I agree to participate in the study, I know I can withdraw at any time until [four weeks] following the collection of my data. I agree information provided by me or with my permission during the project may be included in a thesis, presentation and published in journals on the condition that I cannot be identified.

☐ I agree to have my interview audio and/or video recorded

☐ I would like to receive a copy of the results via email or post. I have provided my details below and ask that they only be used for this purpose and not stored with my information or for future contact.

Name	Email (optional)	Postal address (optional)

### Participant Signature

☐ I have received a signed copy of the Participant Information Statement and Consent Form to keep

Participant's printed name \_\_\_\_\_

Participant's signature \_\_\_\_\_

Date \_\_\_\_\_

### Declaration by Researcher

☐ I have given a verbal explanation of the study, what it involves, and the risks and I believe the participant has understood;

☐ I am a person qualified to explain the study, the risks and answer questions

Researcher's printed name \_\_\_\_\_

Researcher's signature \_\_\_\_\_

Date \_\_\_\_\_

\* All parties must sign and date their own signature

### Withdrawal of Consent

I wish to withdraw my consent to participate in this study. I understand withdrawal will not affect my relationship with La Trobe University or any other organisation or professionals listed in the Participant Information Statement. I understand the researchers cannot withdraw my information once it has been published.

#### I understand my information will be withdrawn as outlined below:

- ✓ Any identifiable information about me will be withdrawn from the study
- ✓ The researchers will withdraw my contact details so I cannot be contacted by them for future studies unless I have given separate consent for my details to be kept in a participant registry.
- ✓ The researchers cannot withdraw my information once it has been analysed, and/or collected as part of a focus group

[Delete if inapplicable] \*\*if you have consented for your contact details to be included in a participant registry you will need to contact the registry staff directly to withdraw your details.

I would like my already collected and unanalysed data

- ☐ Destroyed and not used for any analysis
- ☐ Used for analysis

### Participant Signature

Participant's printed name \_\_\_\_\_

Participant's signature \_\_\_\_\_

Date \_\_\_\_\_

#### Please forward this form to:

**CI Name** Dr Renae Fomiatti

**Email** r.fomiatti@latrobe.edu.au

**Phone** FORMTEXT

**Postal Address** Australian Research Centre in Sex, Health and Society



# Appendix 5:

## Patient interview guide

### Understanding experiences of telehealth care delivery for hepatitis C treatment in Australia

#### Interview guide for patients

#### Opening information for participants:

- This project explores experiences of using telehealth for hep C during the COVID-19 pandemic. It will help us document the support needs of people using telehealth for hep C care delivery and inform improved models of care for the new DAA treatments.
- Participation is voluntary and how you answer the questions is up to you. You don't have to talk about anything you feel uncomfortable about or answer any questions you don't want to answer.
- Everything you say is kept confidential and a range of strategies will be used to protect your identity if you are quoted (as outlined in the consent form you have signed).
- To protect your identity, try to avoid using names of people and places. If you do mention these details, however, we will change or remove them to protect your privacy.
- The interview can be terminated at any time you choose. Please let me know if you would like a break or to stop completely.

#### Opening question

- Can you tell me why you were interested in participating in this study/why you thought this study was relevant to you?

#### The impact of COVID-19

- How did COVID-19 affect you in 2020? (Prompt: employment, finances, living situation, workplace if employed?)
- Did COVID-19 worry you or affect your health? (Prompt: Were you concerned about the virus itself? Impact on the economy? Impact of restrictions?)
- What kind of restrictions were in place in your area? How did these affect you?
- Did you delay seeking treatment for any health concerns or medical conditions?
- Has COVID-19 affected how you think about hep C?
  - Extra concerns?
  - More/less urgent?
- Has COVID-19 changed your thinking about treatment?
  - Extra concerns? More/less urgent?

#### Access to telehealth

- Prior to COVID-19, had you ever used telehealth? When?
- How did you find out about telehealth for hep C treatment?
- How did you find accessing healthcare in this way?
- Did COVID-19 make accessing telehealth difficult (or easier)?
- Would you say that telehealth is easier to fit into your life or harder? Why? Could anything have made using telehealth easier?
- Did the service send reminders (of appointment times, telehealth service)? How did that compare to other healthcare experiences?

#### Challenges

- Did you encounter any challenges or difficulties? Prompt:
  - Were you required to download any special technologies or apps?
  - Did you have access to the required technology already? If not, can you describe to me the process of preparing for the appointment?
  - What devices did you use to keep telehealth appointments (your own or shared devices)? If shared, did you have any concerns about privacy? Any hassles getting access?
  - Time: Did your appointment happen on time or were there delays? Can you describe how this happened and what caused the delay? Did you experience that differently to a delay in a face-to-face medical setting (clinic/doctor's office etc.)?
  - Did you accrue any unexpected costs preparing for the appointment?
  - Did cost affect your ability to access telehealth?
  - Was the technology reliable?
- Did you have concerns about accessing hep C treatment via telehealth?
- Were you supported to use telehealth services? Who by? How?

#### Experiences of telehealth

##### Telehealth service and setting

- Can you describe the telehealth services you have used for hep C treatment (e.g., phone, Zoom, video conferencing)?

- Were you provided with a choice between phone or video? (If YES, how did that come about?)
- What service did you access telehealth through? (e.g., liver clinic, GP, specialist)
- Who delivered the appointment? (e.g., GP, specialist, nurse)
- Was it a one-on-one appointment or were there multiple healthcare providers present? If multiple, did you have a choice in who attended the appointment?
- How long have you been using telehealth for? How many times have you accessed telehealth?
- Could you tell me where were you during your appointments? Did this change (if multiple appointments)?
- Did you have a private and convenient place while calling or videoconferencing?
  - Were there any problems with accessing a private space for your appointments? (e.g., shared living situation/public place/work).
  - Did it feel more or less private compared to being at a clinic or doctor's rooms?
  - When was your first telehealth appointment?
- How did you imagine telehealth before you accessed it? Did you have any preconceptions? (Were you looking forward to it or did you have any concerns?)

### Experience of telehealth

- What did you access telehealth for? (Prompt: diagnosis of hepatitis C, initiate treatment, follow-up hepatitis C care, information about hepatitis C)
- Can you tell me about a recent example using telehealth services for hep C treatment? (Prompt: try to get a long, detailed account)
- Were there other experiences of telehealth different from or similar to the time you've just described?
- Were you required to attend face-to-face services after your telehealth consult (e.g., blood tests, liver tests, fill prescriptions, AOD services)?
  - If YES, did your healthcare provider do anything to assist you?
  - Was it convenient? Did anything not go to plan?
  - Did you have to follow-up with health services/providers to ensure treatment continued?
- How does telehealth compare with your experiences accessing treatment in other ways? Benefits? New opportunities? Things missed or lost?
- Would you like to continue using telehealth services when COVID-19-related restrictions ease? Do you have concerns about telehealth availability in the future?

- Do you think you would have accessed hep C treatment through telehealth if COVID-19 had not happened? Would you have accessed it in a clinic setting instead, or not at all? (If NOT AT ALL, why?)

## Interactions with healthcare practitioners

### Communication

- Which healthcare practitioners have you had contact with via telehealth (e.g., GPs, nurses, specialists)? Were any interactions better than others? Could you explain why?
- Did using telehealth effect the interaction at all? (e.g., Easier? More difficult? Nervous? More comfortable? Distracted?)
- How comfortable did you feel speaking up or asking questions?
- Did the healthcare practitioner do anything in particular to make the experience easier? Could they have done anything to improve the experience?
- How satisfied would you say you were with your experience of telehealth? What did you like about it? What didn't you like about it?
- Were you given the opportunity to ask more questions?
- Were you provided with other information or resources?
- Does telehealth change the kind of relationship you have with healthcare practitioners at all?
- Did you feel more or less able to raise concerns, issues, or questions?

### Stigma

- Have you ever experienced hep C-related stigma or discrimination when using telehealth? If yes, could you describe an example?
- Has using telehealth changed the way you feel about yourself?
- Has using telehealth changed the way you feel about the future?
- Has telehealth changed the way you feel about hep C and/or treatment?
- If you were asked to return to physically coming in for treatment, how would you feel about that?

## Final points

The aim of this project is to find out how people experience telehealth for hep C treatment and obstacles or barriers they identify to the use of telehealth. Given these aims, can you think of anything we haven't discussed already that would be helpful for us to know?

# Appendix 6:

## Healthcare practitioner interview guide

### Understanding experiences of telehealth care delivery for hepatitis C treatment in Australia

#### Interview guide for healthcare practitioners

##### Opening information for participants:

- This project explores experiences of telehealth care delivery for hepatitis C during the COVID-19 pandemic. It will help us document the support needs of health professionals using telehealth for hepatitis C care delivery and inform models of care for the new DAA treatments, which may contribute to the scale up of hepatitis C testing, treatment and management.
- Participation is voluntary and how you answer the questions is up to you. You don't have to talk about anything you feel uncomfortable about or answer any questions you don't want to answer.
- Everything you say is kept confidential and a range of strategies will be used to protect your identity if you are quoted (as outlined in the consent form you have signed).
- To protect your identity, try to avoid using names of people and places. If you do mention these details, however, we will change or remove them to protect your privacy.
- The interview can be terminated at any time you choose. Please let me know if you would like a break or to stop completely.

##### Opening question

- How would you describe your work? How does it relate to hepatitis C treatment?
- How long have you been in this line of work?
- To what extent is telehealth normally a part of your work practice?
- How did COVID-19 impact on how you work?
  - Has your work environment changed because of COVID-19? If so, can you please describe how? (e.g., working from home, privacy etc.)
  - What were the restrictions imposed on the service where you are based?
  - What impact did this have on your ability to provide care?
  - Did you notice any changes in the amount of people accessing hepatitis C care or treatment?
  - How did restrictions in your area/context change over time? (Can you describe how things evolved over the last year?)

##### Knowledge of telehealth for hepatitis C care delivery

- What can you tell me about using telehealth services for hepatitis C care?
- Has your knowledge of telehealth service delivery changed because of COVID-19?

##### Experience of telehealth for hepatitis C care delivery

- Could you please tell me about your experience using telehealth for hepatitis C care delivery during COVID-19?
- What kinds of services do you deliver via telehealth?
- What services are harder to deliver via telehealth?
- Could you describe an example where telehealth care delivery worked well?
- Could you describe an example where telehealth care delivery was challenging?

##### Key professional issues

- Were you given any specific training for telehealth? What professional support was available in the early days? How did this evolve over time?
- Did you face any challenges with the technology used for telehealth? Did the platforms and technologies used in your professional setting change over time? Were there any problems in the chosen approach?
- Does using telehealth for hepatitis C treatment raise any professional issues for you? Prompt:
  - incorporating telehealth with other services
  - technological issues
  - follow-up
  - prescribing
  - client-engagement and retention
  - testing and pathology
- Does using telehealth affect the way you are able to coordinate with other practitioners involved in the patient's care?
- Does using telehealth for hepatitis C treatment affect the engagement between you and your clients/patients? Frequency of contact/tone of interactions/ follow up/ retention etc.?

- Does telehealth affect the structure of a standard consultation in any way? Do you find that some conversations happen less in a telehealth setting? If so, what kinds?
- Does telehealth impact the kinds of conversations patients will have with you? e.g., asking questions, expressing concerns.
- Do you think you take a different approach with in-office compared to telehealth consultations? In what way?
- Does telehealth raise any concerns for you about patient consent?
- Does using telehealth pose any challenges for your clients/patients? (e.g., access, technology, privacy, confidentiality). How do you tend to tailor telehealth to different client populations?
- Can you think of an example of an approach you took in the early days of telehealth that you needed to adjust? What were some expectations you had that were different in reality?
- How did you manage reminders for appointments?
- How did you manage any delays in your schedule?
- Were there any difficulties in managing these? How does this compare to clinic/office treatment?
- Is there a need for more training on providing hepatitis C treatment via telehealth?
- Are there any particular knowledge gaps in this area you think need to be addressed? What do we need to know more about? How could these be addressed?
- Are there any particular groups of people that you think would especially benefit from increased uptake of telehealth? How would this group of people benefit particularly?
- I've asked a few questions about specific aspects of the treatment relationship, but is there anything else missing from the telehealth consultation?

### Telehealth access and uptake

- How might we improve uptake of telehealth services for hepatitis C care and treatment?
- Does telehealth make treatment more accessible to harder-to-reach or different kinds of consumers?
- How did your existing clients respond to the shift to telehealth in the early days of the pandemic?
- How did COVID-19 impact healthcare in general? Do you see telehealth as mitigating some of the challenges posed by COVID-19? How did this change over time?
- Can you discuss any challenges or impediments to telehealth care delivery for hepatitis C that you've come across?

- Are there any particular positives or negatives to telehealth that deserve attention?
- What does good telehealth services for hepatitis C care and treatment look like to you?
- What are your thoughts on the future of telehealth?

### Final points

The aim of this project is to improve telehealth care delivery and its usefulness for hepatitis C care and treatment. Given this aim, can you think of anything we haven't discussed already that we need to know?









La Trobe University proudly acknowledges the Traditional Custodians of the lands where its campuses are located in Victoria and New South Wales. We recognise that Indigenous Australians have an ongoing connection to the land and value their unique contribution, both to the University and the wider Australian society.

La Trobe University is committed to providing opportunities for Aboriginal and Torres Strait Islander people, both as individuals and communities, through teaching and learning, research and community partnerships across all of our campuses.

The wedge-tailed eagle (*Aquila audax*) is one of the world's largest.

The Wurundjeri people – traditional owners of the land where ARCSHS is located and where our work is conducted – know the wedge-tailed eagle as Bunjil, the creator spirit of the Kulin Nations.

There is a special synergy between Bunjil and the La Trobe logo of an eagle. The symbolism and significance for both La Trobe and for Aboriginal people challenges us all to 'gamagoen yarrbat' – to soar.


## Contact

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