



Sustaining sexual and reproductive health through COVID-19 pandemic restrictions: qualitative interviews with Australian clinicians

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ABSTRACT

Background. The sexual and reproductive health care of people with HIV and those at risk of HIV has largely been delivered face-to-face in Australia. These services adapted to the coronavirus disease 2019 (COVID-19) pandemic with a commitment to continued care despite major impacts on existing models and processes. Limited attention has been paid to understanding the perspectives of the sexual and reproductive health care workforce in the research on COVID-19 adaptations. Methods. Semi-structured interviews were conducted between lune and September 2021 with 15 key informants representing a diverse range of service settings and professional roles in the Australian sexual and reproductive health sector. Inductive themes were generated through a process of reflexive thematic analysis, informed by our deductive interest in clinical adaptations. Results. The major adaptations were: triage (rapidly adapting service models to protect the most essential forms of care); teamwork (working together to overcome ongoing threats to service quality and staff wellbeing), and the intwined themes of telehealth and trust (remaining connected to marginalised communities through remote care). Despite impacts on care models and client relationships, there were sustained benefits from the scaleup of remote care, and attention to service safety, teamwork and communication. Conclusions. Attending to the experiences of those who worked at the frontline of the COVID-19 response provides essential insights to inform sustained, meaningful system reform over time. The coming years will provide important evidence of longer-term impacts of COVID-19 interruptions on both the users and providers of sexual and reproductive health services.

Keywords: Australia, clinician perspectives, COVID-19, gender affirming care, HIV prevention and treatment, qualitative research, service adaptations, sexual and reproductive health.

Introduction

A range of impacts of the coronavirus disease 2019 (COVID-19) pandemic on the sexual and reproductive health of different populations have been documented, including significant declines in casual sex^{1,2} and sex work³ during lockdowns, and some reported declines in new diagnoses of sexually transmitted infections (STIs) and human immunodeficiency virus (HIV).^{4,5} However, STI prevention and care remained a public health concern throughout the different waves of the COVID-19 pandemic,⁶ including periods of 'making up for lost time',⁷ when restrictions lifted, as did the provision of continuous HIV prevention and treatment services,^{8,9} contraception, abortion, and cervical screening.^{10–13} The capacity of sexual and reproductive health services to sustain these forms of care during COVID-19 restrictions differed around the world. For example, a scoping review found that COVID-19 had impacted access to family planning, maternal and child health services globally,¹⁴ and a systematic review found COVID-19 had disrupted access to abortion, contraceptives, and STI/HIV testing services in most settings.¹⁵

Before COVID-19 began to impact Australia in early 2020, the sexual and reproductive health care of people with HIV and those at risk of HIV was delivered largely face-to-face. National guidelines recommended 3- to 6-monthly HIV management consultations, 16 and HIV/STI testing was recommended every 3 months for all HIV-negative men who have sex with men and other high-risk groups. 17 Almost half of all HIV tests were performed in-person at sexual health clinics and community-based services, with the remainder in general practice, and a very small number at home or elsewhere. 18,19 Pre-exposure prophylaxis (PrEP) for HIV was accessed through either specialist sexual health clinics or general practice, and PrEP users were recommended to have quarterly face-to-face visits to discuss ongoing eligibility, other health issues, as well as HIV, STI, and kidney function tests.²⁰ Reproductive health care was provided through a range of settings, including general practice, sexual health centres, non-government family planning clinics and community-based services.²¹ Gender-affirming care was also provided in a variety of settings, including in some settings that provided sexual and reproductive health care, including general practice, but this was variable.²²

These services adapted to COVID-19 with a commitment to continued care, but a decrease in some face-to-face services, significant impacts on workforce capacity, and a notable reduction in patients attending during restrictions.²³ HIV testing rates dropped in some settings, but this was assumed to be based on client fear of catching COVID-19 if they travelled to the service, rather than disruptions in services.²⁴ STI diagnoses remained fairly stable, despite reductions in patient presentations to sexual health clinics, particularly in asymptomatic presentations.⁴ Other service changes included a reduction in the frequency of consults, and posting or emailing prescriptions and pathology request forms to patients.²⁵ Although these innovations supported continuity in HIV care services, 25,26 PrEP dispensing dropped during restrictions,²⁷ with a 33% decline observed in the week following the first lockdowns in April 2020.²⁸ There was also a large reduction in post-exposure prophylaxis (PEP) prescriptions and HIV tests in 2020, which did not rise again until COVID-19 cases dropped, including after restrictions had lifted.²⁹

Limited attention has been paid to the perspectives of the sexual and reproductive healthcare workforce in the research on COVID-19 adaptations, which is a missed opportunity to understand both workforce capacity to adapt and the potential for sustaining improvements through and beyond pandemic restrictions. Some workforce perspectives have been reported in research on the challenges of delivering these services by telehealth, including among the US workforce involved in responding to intimate partner violence and sexual assault, 30 UK sexual health services, 31 Australian family planning service providers, 32 and Australian hepatitis C treatment providers. 33 However, as observed in the international literature, very little qualitative research

has documented professional perspectives on adaptations to sexual and reproductive health care during COVID-19, which may 'obscure understanding on how marginalisation and structural forces shape sexual health within the pandemic'.^{5,34} This paper contributes to addressing this gap by capturing in-depth perspectives from Australian professionals involved in delivering sexual and reproductive health care through the first 2 years of the COVID-19 pandemic.

Methods

Semi-structured interviews were conducted between June and September 2021 with 15 key informants. We aimed to recruit participants with expertise in sexual and/or reproductive health care, HIV prevention, and HIV care, treatment and monitoring services, across different settings in Australia, including publicly funded sexual health centres, private general practice clinics, peer-led (community-based) HIV and STI testing services, family planning and women's health clinics, and hospital infectious disease units. To be eligible, participants needed to have worked in clinical practice in the fields of sexual health or HIV care and/or prevention both before and during the 2020–21 COVID-19 restrictions. Ethical approval was received from the Human Research Ethics Committee of UNSW Sydney (HC210327).

Participants were identified through formal and informal networks. Information about the study was distributed via email to representatives of key services, and their suggestions compiled into a longlist, supplemented with input from the project team who have networks across sexual and reproductive healthcare settings. Author 1 (CEN) selected a shortlist of prospective participants, aiming to achieve a balance of perspectives across the different service settings, states, and areas of population density.

Willing participants recorded their consent through a secure online form in Qualtrics (Provo, Utah, USA). No reimbursement was provided to participants. Interviews were conducted by video call unless connection quality required video to be turned off, or the interview had to be moved to a phone call instead. Interviews lasted an average of 51 min and were audio-recorded. Recordings were transcribed verbatim by a professional transcriber and then checked for accuracy by CEN, who also de-identified the data by removing the names of people and organisations, as well as any stories that would be easily identifiable.

Interviews explored how clinical practice changed once COVID-19 restrictions began, how service users and other service providers responded to these changes, how clinical practice adapted again with easing of COVID-19 restrictions, and impacts on quality of care and client relationships. Participants were also asked if these experiences had changed their views on the design of sexual and reproductive health services, including which adaptations might remain, and

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what their preferences were for models of clinical service delivery based upon these learnings during COVID-19.

All interviews were conducted by CEN, and the rest of the research team was only aware of the demographic characteristics of the whole sample to protect participant confidentiality. Recruitment continued until CEN determined that the data was sufficiently rich (e.g. featuring a broad and distinctive range of perspectives) and consistent enough to support a robust qualitative analysis. Analysis followed the process outline for reflexive thematic analysis, 35 beginning during the interviewing process when summary notes were compiled after each interview and shared with the research team for discussion. Deidentified transcripts were read in full and coded line-by-line by CEN to identify areas of consistency and difference to produce overarching themes. Theme generation was inductive, but informed by deductive insights, given our primary interest in participant perspectives on clinical adaptations. Interview extracts are included here with reference to the interview number, and a generic description of the role and setting of each participant.

Results

A diverse range of perspectives was captured across self-reported gender, Australian states, urban and regional locations, and professional roles (Fig. 1). Some participants worked across more than one setting, and so the total

number of participants in 'Roles and service types' is greater than 15.

At the time of interviews, participants had experienced 12–16 months of COVID-19 pandemic restrictions, including extensive periods of lockdown in Melbourne, Victoria, and to a lesser extent in Sydney, New South Wales. Participants described a wide range of experiences in adapting their services in the context of these restrictions, as well as broader observations and beliefs about the impacts of the COVID-19 pandemic itself, government responses to it, and on the communities they cared for. Three themes were generated, which captured the major areas of adaptation described in these interviews. In each section, we discuss the reported experiences of those adaptations, as well as conclusions the participants had drawn from those experiences for imagining what this meant for future service models.

Triage: rapidly adapting service models to protect the most essential forms of care

Across the different settings, participants described rapidly adapting service models to sustain the provision of essential forms of care to their most vulnerable clients: "There was a real sense of urgency, of having to be prepared [...] "How on earth are we going to meet the needs of our clients?" [and] "Who on earth don't you see?"" (P4: public sexual health service nurse). The groups that tended to be most

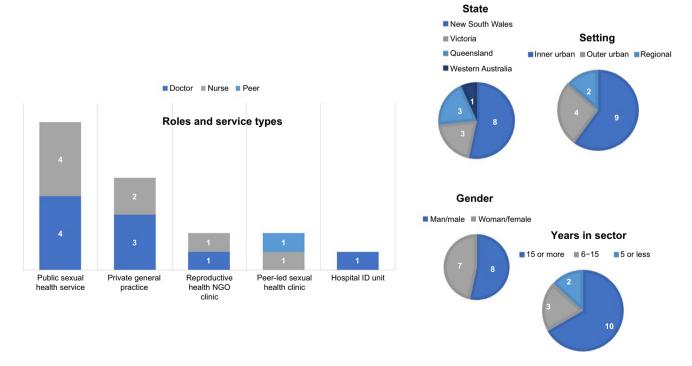


Fig. 1. Participant sample.

consistently prioritised for face-to-face consultations were captured by one participant as:

Anyone who is HIV-positive. Anyone who had symptoms, either STI symptoms or any other HIV-related symptom [and] people who were sort of in our system as being higher need. So who maybe were known to have difficulty taking their meds or who were in some sort of difficult situation housing-wise or family-wise, or violence-wise. Like the ones, the people we knew were really, we were lucky to see them, we'd never turn them away. (P12: public sexual health service nurse)

STI screening changed radically, with most routine testing deferred or moved to telehealth: 'if someone just wants to have a check-up for the sake of it, [that] doesn't cut it' (P7: public sexual health service doctor). Rapidly adapted processes were developed, including asking clients to self-collect some STI swabs, to minimise interactions, and trial home-based HIV testing, with variable success. Although there was openness among patients to most adaptations, some reported reluctance to test for HIV at home, and there were more inconclusive results from self-collected STI swabs.

Services that included a focus on reproductive health took a similar approach to prioritising the most urgent matters:

We kept [Long Acting Reversible Contraception] going as much as we could. We kept, obviously, symptomatic women ... And we absolutely shifted medical abortion to a lot of telehealth abortion. [And] originally, we probably did stop, it was a bit temporary, really, but we did stop those routine cervical screenings. (P15: reproductive health non-government organisation (NGO) doctor)

HIV management was adapted by extending the timeframe between appointments, particularly for clients who had been stable for some time, and delivering prescriptions and pathology requests remotely. However, there were some distressing experiences that patients had reported to clinicians about local pathology centres not knowing how to collect anal or throat swabs, misreading the request for HIV viral load and antibody tests, or disclosing HIV status inadvertently:

I ended up having to write or did write 'discretion please' and underlining it on the pathology forms 'cause there was occasions where the phlebotomist would say, 'I don't know what tube the HIV viral load goes in,' totally breaking confidentiality, shouting it across a waiting room full of people. (P1: sexual health service doctor)

Participants were accepting of the need for these adaptations, and supported the continuation of the practices that worked well, including reducing unnecessary

or overly frequent consultations, and continuing to improve processes for remote prescription and pathology tests, and self-collection and home-testing services. However, there was a lot of anxiety expressed about the longer-term health impacts that interruptions to services may have had on patients. Indeed, evidence was already emerging of some serious clinical outcomes, including anal cancer, complications associated with late diagnosis of STIs, and late-stage pregnancy terminations. Deferral of elective surgeries had also caused immense stress, and there was one account of a patient dying by suicide after experiencing the repeated deferral of gender-affirming surgery. For these reasons, the end of intensive triaging was welcomed, even if the insights gained would inform a more efficient approach in future.

Teamwork: working together to overcome ongoing threats to service quality and staff wellbeing

The second major adaptation related to the functioning of teams, including a rapid series of changes in staff roles and responsibilities, and the development of new approaches to communication and support. Many public health services were significantly impacted by the redeployment of staff, as well as government requirements for staff to isolate if they were close contacts of COVID-19 infected people or had symptoms of COVID-19:

One of the big impacts was that we kept not having a nurse [or] receptionists, because they kept getting [...] upperrespiratory symptoms and so they wouldn't be allowed to come to work until they've had a COVID test [...] And the same with some of our doctors as well. (P6: general practice doctor)

Team cohesion was also impacted by the stressors of engaging with highly distressed clients, in addition to managing the personal impacts of COVID-19 anxiety and sustained uncertainty:

Some staff would slam themselves against the walls of the corridor when you passed [... Or] were trussed from head to toe in headwear and several masks, and scrubs, and PPE [...] it seemed a little over the top compared to the actual risk. (P1: public sexual health service doctor)

It was literally a day by day, 'What are we doing today? How are we gonna manage it?' I'm the boss, so people asked me and I had no idea how to do it. And it was kind of making it up. I found it very disruptive because I, you know, we humans don't like uncertainty and there was a lot of uncertainty. And I didn't know what was best for my patients, for my staff, all those at the service. (P2: public sexual health service doctor)

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Services that focused on regular, clear communications reported benefits for both team cohesion and process efficiencies:

I think one thing that worked really well, like it actually made our communication better [...] we had like a daily check-in [and] It took us a little while to learn to really delineate the roles [but now we've] certainly kept that. So it's almost made our ship a little bit tighter and more efficient as well. (P5: peer-led sexual health service nurse)

Some participants felt the COVID-19 pandemic provided them with a reminder of why they had been drawn to clinical care originally, enjoying the opportunity to be working together to face a health crisis as a team. Although there were some examples of remote working options for clinical and health promotion staff, most services had focused on keeping clinicians safe in continuing to work on site, which may have helped with this experience of team bonding. Despite these positive accounts, there were also reports of tensions and differences being amplified, including in responding to these adaptations:

There are people that are doers and facilitators, and there are people that are blockers. And it was quite [clear] within the organisation who those people were that saw the bigger picture. (P4: public sexual health service nurse)

However, as a general observation, most participants believed the sexual and reproductive healthcare workforce had proven itself ideally suited to adapting to COVID-19, because of their familiarity with infectious disease: 'I think that we've dealt quite well with it compared to a lot of areas. No-one's really freaking out' (P13: public sexual health service doctor). Looking to the future, participants were committed to continuing the improvements they had observed in team communication and support, and exploring new opportunities for remote work. But some also believed it was important to recognise there had been significant impacts on this workforce, and a lack of wider system appreciation for the leadership that many in this sector had played in the COVID-19 pandemic response. These participants believed very strongly that the sexual and reproductive healthcare sector deserved more specific resourcing and recognition of their unique contributions to infectious disease responses should pandemic restrictions be repeated in future.

Telehealth and trust: remaining connected to marginalised communities through remote care

Telehealth provided one of the major opportunities for adapting services during the COVID-19 pandemic, but in the case of our participants, this innovation was described as a mechanism for both continuing to provide care, and for remaining connected to a range of different communities. Telehealth was described as offering greater efficiencies for less complex consultations, or for those patients who had very busy lives:

The PrEP fellas were kind of often happy that they didn't have to come in so often and, and see us, and we could do it all in a simple way that didn't interfere with their life as much... Same with the women for medical abortion. If [...] they've got kids at home, it's much more convenient than driving to see us. (P2: sexual health service doctor)

But remote care platforms also made it possible to reach communities who had been previously isolated by distance or other structural issues. For example, some services were able to start providing specialist HIV and gender-affirming care to people in regional and remote areas for the first time: 'I think it really opened up our eyes in terms of the reach that we can actually get from that modality' (P5: peer-led sexual health service nurse).

Telehealth also offered an opportunity to strengthen service engagement with groups who had always been less than ideally supported by the sexual and reproductive healthcare system:

[COVID-19] shone a spotlight on the inequities that were already there and heightened them in terms of rural and remote access to care, in terms of Indigenous peoples' access to care, in terms of young people, LGBTIQ [...] And, so, here as elsewhere, there has been this look to how can we actually maintain access or even, you know, enhance access, for these more marginalised populations. (P15: reproductive health NGO doctor)

There were some concerns expressed about the impacts of telehealth also. For example, a range of challenges were experienced in trying to build or sustain trust with clients with limited English, or who did not have access to private spaces. Many participants were concerned about missing the cues into health and wellbeing provided through body language, or what one public sexual health doctor described as 'their general body habitus' (P13).

Concern was also expressed about the limitations of telehealth in reaching sex working communities, who could not be supported by outreach services while they were not legally permitted to be operating, as well as those experiencing homelessness, substance use issues, and mental health issues. And indeed, when looking to the future, many participants were concerned about the challenges of rebuilding trust with communities whose lives were already precarious, under-resourced and vulnerable to compounded harms:

In the recovery period from last year's COVID it was a major, long haul, a long course to get our client base

back, to reconnect with them [...] I said to [my colleagues], 'All this good work that we've done is kind of being unravelled.' [...] We're gonna have to work hard at re-engaging with the priority-population community. (P7: public sexual health service doctor)

So, although telehealth remained the adaptation that participants were most emphatic about needing to continue into the future, they did not see this as replacing the need for other strategies for re-engaging the communities who were already viewed as hard to reach, and who had been negatively impacted by COVID-19 pandemic restrictions. Finding ways to better integrate services, and to extend the scope of both telehealth and outreach services, were described as critical to achieving a more robust future service model, one that satisfied both efficiency and engagement priorities.

Discussion

This study provides timely evidence of the ways that sexual and reproductive healthcare services were adapted in Australia to sustain the delivery of quality care to people with HIV and at risk of HIV and STIs throughout the stress and uncertainty of the first 2 years of the COVID-19 pandemic. Qualitative interviews document the experiences of a small number of participants, but the depth of insight they have provided in this study are demonstrably valuable for understanding how the experience of service adaptation can inform sustained, meaningful system reform over time.

Although limited studies of workforce perspectives have been published in either Australia or comparable settings, there are a number of ways in which these findings align with, and extend from, what has been described elsewhere. Similar adaptations were reported to what has been already described in some studies from Australia and elsewhere, regarding the way that continuous care to people with HIV and PrEP users was sustained, and the most urgent elements of STI screening and treatment, as well as contraception and (medical) abortion, maintained. 4,23–25,36,37

Although difficult to compare across settings, the work invested in adapting rapidly suggests that the impacts on sexual and reproductive healthcare services were not as dramatic in Australia as they had the potential to be, and were in many settings. 6,9,12,13,38–41 As reported elsewhere, 42 there were anxieties expressed by our participants about the longer-term health impacts of service restrictions, although there was clear agreement that it was essential to protect access to HIV therapies, PrEP, testing and treatment of symptomatic STIs, contraception and abortion.

Frustrations were expressed about the unpreparedness of some private pathology providers to collect HIV and STI samples, and barriers to some new innovations, including self-collection, home testing, and some of the newer applications of telehealth. Distilling lessons from this period should therefore include attention to the ways in which a broader range of services can continue to be offered in an integrated fashion during periods of crisis, to ensure that those considered less essential in the short term are still accessible in some form. Developing detailed clinical service plans that make clear how services can be adapted to pandemic circumstances is recommended across settings.

There was a strong theme in the interviews on the role teamwork played in adapting to the COVID-19 pandemic, with impacts on workforce effectiveness, interpersonal relationships and individual stress. Some teams were mobilised by a renewed sense of purpose and a shared ethos of care for vulnerable communities, and non-stigmatising or fear-based responses to infectious disease. Although these have been documented in research on the motivations of the HIV general practice workforce, 43,44 there may be value in recognising the ways in which a shared professional culture across the sexual and reproductive health workforce supported their contribution to the COVID-19 pandemic responsiveness. Drawing on the clinical, emotional and political competencies of this workforce in training other professional groups both within and outside the health system could provide mutual benefits. These suggestions have the most direct implications for those involved in the design and delivery of continuing professional education, but there may be opportunities to feature the stories and experiences of this workforce in other contexts, including conferences and social media channels.

Although there is a broad recognition that digital and other remote modes of service provision proved essential in responding to the COVID-19 pandemic, \$\bar{3}1,32,41,45,46\$ and there were many benefits to the rapid scale-up of existing telehealth systems during the pandemic, the mechanisms by which these modalities can be both sustained and extended are yet to be seen. There was a very strong commitment expressed in these interviews to maximising the potential of telehealth for greater efficiency, acceptability, sustainability and equity. However, few studies have explored telehealth as a service innovation with the potential to provide benefits in sustaining connection to communities at risk of long-term disengagement when services are disrupted. More research is needed to understand more about the complex dynamics involved in sustaining trust and connection through digital means. There is no doubt, however, that telehealth services were highly valued by all participants and seen as an essential adaptation for sustaining beyond periods of pandemic response. Investment is highly recommended in continuing to improve the technologies that support telehealth, and to ensure there is ongoing support from government for subsidising these forms of essential health service provision.

To conclude, this interview study captured a range of shared experiences among a diverse group of professionals, www.publish.csiro.au/sh Sexual Health

which reveals how the sexual and reproductive health sector was able to sustain essential forms of care through a period of incredible challenge and change. Although there were clear impacts on the scope of care delivery, and potential impacts on relationships with some client groups, there were also unexpected benefits from the scale-up of remote care delivery options, and inspiring accounts of service safety, teamwork and communication improvements. The coming years will provide evidence of the longer-term impacts of COVID-19 pandemic interruptions on both the users and providers of sexual and reproductive health services, but in the shorter term, these insights into the lived experience of adapting to a major disruption point to an incredible sense of resilience, fortitude and commitment to quality care in this essential area of the Australian health system.

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Data availability. The qualitative data reported in this paper is not available for public access because it is not possible to maintain participant confidentiality in interview transcripts, even when deidentified.

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