

Client and staff perceptions of acceptability of MyCheck: a direct-to-pathology telehealth and e-testing service for comprehensive bloodborne virus and sexually transmissible infection screening

Lise Lafferty^{A,B,*} , Clinton Rautenbach^{A,C}, Anna McNulty^D , Nathan Ryder^{E,F} , Carolyn Slattery^E, Rebecca Houghton^D, Aurelie Kenigsberg^G, Carolyn Murray^H, Nigel Carrington^{D,H} and Prital Patel^A

For full list of author affiliations and declarations see end of paper

*Correspondence to:

Lise Lafferty
The Kirby Institute, UNSW Sydney, Level 6,
Wallace Wurth Building, Sydney, NSW 2052,
Australia
Email: l.lafferty@unsw.edu.au

Handling Editor:

Dan Wu

Received: 5 December 2023

Accepted: 12 April 2024

Published: 29 April 2024

Cite this: Lafferty L *et al.* (2024)

Client and staff perceptions of acceptability of MyCheck: a direct-to-pathology telehealth and e-testing service for comprehensive bloodborne virus and sexually transmissible infection screening. *Sexual Health* **21**, SH23194. doi:[10.1071/SH23194](https://doi.org/10.1071/SH23194)

© 2024 The Author(s) (or their employer(s)). Published by CSIRO Publishing.

This is an open access article distributed under the Creative Commons Attribution 4.0 International License (CC BY).

OPEN ACCESS

ABSTRACT

Background. Sydney Sexual Health Centre (SSHC) is the largest sexual health clinic in New South Wales (NSW), servicing clients at high risk of sexually transmissible infections and bloodborne viruses. SSHC piloted a direct-to-pathology pathway that facilitated bloodborne virus/sexually transmissible infection testing at one of the ~500 participating pathology collection centres located across NSW. This qualitative study sought to understand SSHC client and provider perspectives of acceptability of the MyCheck intervention. **Methods.** Semi-structured in-depth interviews were conducted with 11 clients who underwent testing via the MyCheck pathway and eight staff members involved in implementing MyCheck. The seven components of Sekhon's Theoretical Framework of Acceptability informed this analysis. **Results.** Participants broadly conveyed 'affective attitude' toward the MyCheck pathway. The telehealth intervention reduced client 'burden' and 'opportunity cost' through enabling greater testing convenience at a location suitable to them and provided timely results. Issues of 'ethicity' were raised by clients and staff as pathology centre staff were, on a few occasions, regarded as being judgmental of SSHC clients. 'Intervention coherence' issues were largely attributed to pathology centre personnel being unfamiliar with the intervention, with billing issues being a recurrent concern. Participants perceived MyCheck as an 'effective' testing pathway. SSHC staff were able to offer the intervention with ease through seamless IT integration ('self-efficacy'). **Conclusion.** The MyCheck intervention was perceived by both SSHC clients and staff as an acceptable bloodborne virus/sexually transmissible infection testing pathway. However, further work is required to address stigma experienced by some clients when attending pathology collection centres.

Keywords: acceptability, bloodborne virus testing, digital health intervention, priority populations, qualitative research, sexual health, sexually transmissible infection testing, telehealth.

Introduction

Routine screening of sexually transmissible infections (STIs), including gonorrhoea and chlamydia, and bloodborne viruses (BBV; i.e. HIV and hepatitis C), are recommended for at-risk population groups, including men who have sex with men (MSM), trans and gender diverse people, sex workers, and people who inject drugs.¹ As many STIs are asymptomatic, regular testing allows for earlier detection of exposure and treatment for infections, thereby reducing transmission.² In Australia, testing guidelines recommend routine BBV/STI testing among MSM every 3 months.³ Among sex workers, this frequency may vary by jurisdiction, with some states legally mandating routine testing among this population group.³ Increasing access to BBV/STI testing is a target of the national strategies.⁴⁻⁸

The coronavirus disease 2019 (COVID-19) pandemic has impacted the ways people engage in health care, including for BBV/STI testing.⁹ Amid public health-imposed lockdowns and clinic capacity constraints due to staff illness and redeployment, alternatives for

engagement with health care became necessary, with many health services pivoting to telehealth and digital platforms for healthcare delivery.¹⁰ Healthcare responses to the COVID-19 pandemic have driven a push to implement telehealth and other digital models of care,¹¹ ensuring that people are able to seek health care in ways that are convenient and accessible to them. Digital health interventions have been shown to be effective, particularly for LGBTIQ+ populations.¹²

In response to the diverse BBV/STI testing needs for patients during COVID-19 restrictions, the MyCheck BBV/STI testing pathway pilot was implemented at Sydney Sexual Health Centre (SSHC), in New South Wales, Australia, between June 2021 and February 2022. During this time, greater metropolitan Sydney experienced a lockdown of 3.5 months. While healthcare services were exempt, capacity was significantly reduced during these imposed restrictions. Rather than clients attending SSHC in Sydney's urban centre for routine testing as per standard care, existing SSHC clients were offered the option of a telehealth appointment, and an automated pathology referral that facilitated BBV/STI testing directly at a pathology centre (within a large network of providers in NSW) located across Greater Sydney.

Sekhon and colleagues' Theoretical Framework of Acceptability (TFA) is the first framework to provide a comprehensive definition, utilising seven components of acceptability of a healthcare intervention.¹³ These components, comprising perceptions of acceptability, are: affective attitude (how a person feels about participating in the intervention); burden (any additional burdens associated with participating in the intervention); ethicality (whether the intervention is perceived as ethical); intervention coherence (understanding how the intervention works); opportunity cost (any additional time or other financial costs associated with participating in the intervention); perceived effectiveness (how well the intervention is perceived to work); and self-efficacy (the ability to participate in the intervention).¹³ The TFA was designed for use to assess acceptability from both the healthcare provider and patient perspectives.¹³ Utilising the TFA, this paper explores patient and healthcare provider perceptions of acceptability of the MyCheck BBV/STI testing pathway, a digital testing pathway implemented at SSHC (the state's largest publicly funded sexual health service).

Materials and methods

SSHC clients routinely receive a BBV/STI reminder text every 3 months to encourage regular screening for STIs. Clients are then instructed to contact SSHC by phone and arrange an appointment with a nurse who asks scripted questions to assess BBV/STI risks and determine relevant testing protocols. Clients also actively call or physically walk-in to SSHC for appointments. During pilot implementation of MyCheck (June 2021–February 2022), eligible clients were offered the

MyCheck digital testing pathway during the telephone triage process. Sexual Health Infolink provided the interface between the client, pathology provider and the clinic to welcome the client, submit pathology order, and process results. The MyCheck service provided barcodes (delivered via SMS by the pathology service) that transcribed into digital pathology forms when scanned at participating collection centres. Simultaneously, the Sexual Health Infolink database sent a welcome email to clients with instructions on how to do self-collection. Clients received this digital code within 4 h of phone referral; the barcode was valid for 2 weeks. Eligible clients included existing SSHC clients who regularly underwent BBV/STI testing as part of routine screening. Clients were ineligible for the MyCheck pathway if they were new to the service or required additional clinical care.

Interviews were conducted with SSHC clients (October 2021–January 2022) who underwent the MyCheck digital testing pathway and SSHC staff (October–November 2021) involved in implementation of MyCheck. Purposive sampling was completed to ensure representation of clients who received negative results and those who had received a positive result via the MyCheck pathway. SSHC staff were eligible to participate in an interview if they were directly involved in either the implementation or operation of MyCheck, including nursing, managerial, and IT staff. Client participants were remunerated with an AU\$50 e-voucher as compensation for their time; staff participants were not remunerated.

The semi-structured interview guides for both clients and staff included participant demographics and themes relevant to acceptability.¹³ Two postdoctoral researchers with experience in qualitative interviewing conducted the interviews. Client participants were informed of the qualitative sub-study by the sexual health nurse at SSHC during the initial introduction of the MyCheck pathway. Contact details of clients who provided preliminary verbal consent to participate in an interview were contacted directly by one of the two interviewers. A list of staff participants involved in the implementation of the MyCheck pathway was provided to the study team by SSHC. Potential participants were contacted directly by the interviewer. Participation in an interview was entirely voluntary, with no specific information of participation reported back to SSHC (for clients or personnel). All interviews were one-on-one (one interviewer and one participant) and conducted over the phone or via Zoom or Teams (with platform chosen by participant). Interviews were audio-recorded then transcribed by a professional transcriber; transcripts were proofed for accuracy. De-identified transcripts were uploaded to NVivo qualitative software (Ver. 12; QSR International); transcripts were iteratively coded, with preliminary findings discussed among the interviewers throughout data collection. A deductive coding framework was developed among the authors and informed by Sekhon's acceptability framework. To ensure interpretation of data, two transcripts were separately coded by the first two authors then compared; discordant coding was discussed until agreement was reached.

Remaining coding was completed by the first author. Participant recruitment was completed when data saturation was achieved; staff recruitment was limited to those directly and indirectly involved in implementation of MyCheck.

Ethics approval was obtained from South-Eastern Sydney Local Health District Human Research Ethics Committee (Ref: 2021/ETH01422).

Results

Eleven SSHC clients who underwent BBV/STI testing via the MyCheck pathway participated in semi-structured interviews. Client participants had a median age of 35 years (range, 20–42 years), identified as male (91%; one female; no transgender, non-binary, or undisclosed gender); nine received prescription PrEP (although one had not yet filled/used their script). Three clients had received a positive STI result following testing via the MyCheck pathway (two chlamydia, one gonorrhoea). All client participants reported routine BBV/STI testing; for men this was attributed to having sex with other men, the female participant engaged in sex work. Eight SSHC staff participated in semi-structured interviews. Staff roles included people directly involved in implementation of the MyCheck pathway (e.g. nurses) and those involved in operationalising the digital testing platform (including management, senior positions, and IT personnel).

Affective attitude

Affective attitude refers to how a person feels about taking part in an intervention.¹³

Clients

Clients reported positive affective attitude about the MyCheck testing option because of the pathway's convenience via digital communication rather than needing to attend an in-person consult at SSHC.

I was like, kind of like happy because if you are taking my phone call and you are organising that for me and you are sending me a text message or an email with the referral, I can just go down tomorrow morning before work [...] when they open, you know what I mean, then it could be done. (Client #1, male, negative result)

As long as it's easy, convenient, and fast you know, those are the key words you know; people are attracted to that. (Client #10, male, positive result)

Staff

As demonstrated in client responses' above, the ability to choose where to get tested was highly regarded. Likewise, several SSHC staff described valuing the ability to offer

different testing options, afforded by the inclusion of the MyCheck pathway within their clinical repertoire. Providing choice to patients was viewed as an important part of fostering patient agency and catered to the diversity of patients' personalities and population groups.

With [MyCheck], we would like to get as much choice as we can and then this test has come along, this has given us another choice [...]. I think it's wonderful and fantastic to give people as many choices as possible. (Staff #7)

Burden

Burden refers to the 'perceived amount of effort required to participate in the intervention' (p. 8).¹³

Clients

There was considerable overlap of affective attitude and burden from the patient perspective due to the perceived convenience of the MyCheck pathway compared with standard testing processes of travelling into the city and being seen at the SSHC. Patients who were experienced with routine STI testing reported reduced anxiety burden with the MyCheck pathway compared to standard testing, attributed to the streamlined process whereby clients could integrate testing into their day rather than waiting weeks for, and then attending, appointments with lengthier timelines to receive test results.

Well, she sent me the form and I can just walk there anytime like there is no specific date or time that I need to be there if that makes sense, so I can just go anytime and just show them the bar code. So, they sent me a link to a bar code, and I just need to show it to the person at the pathology service. So, less commitment I would say. (Client #10, male, positive result)

For patients who were notified by a sexual partner that they may have been exposed to an STI, the streamlined pathway for testing and treatment was viewed as reducing burden on sexual engagement through swift progression of testing, results, and access to treatment compared with standard testing pathways.

I wouldn't have minded obviously going in but it was just the ease and the quickness because with something like that I guess you just want to get back to life as normal as quickly as possible, so if you are not having to wait around for a referral to get tested then that saves a lot of time. [...] I mean, if you've got to wait a week and a half to get the referral and a few more days to get the results back and then you have got to wait a week for the treatment to kick in, that's nearly three weeks without any sex with your partner [...], so the sooner that you can get back to a normal kind of pattern and stuff like that, the better. (Client #11, male, positive result)

Staff

SSHC staff participants described a transition of burden, with additional workload burden being higher when the pathway was first adopted by SSHC to reduced burden once staff had become familiar with integrating the pathway into their work practice. Additionally, as demonstrated by a nurse participant below, affective attitude often alleviated burden of implementation. The seamless inclusion of the technological components, such as within existing patient management software, reduced staff burden of integrating offers of MyCheck into their workload.

I think once we all became familiar with it, it was actually ... if you looked at the bigger picture it was helpful because initially it did feel like it was going to be a huge impact on phone triage. Phone triage is really, really busy, so when we were unfamiliar with the questionnaire and the process, then it was like 'Oh, this is so big' when we got lines of calls coming in, but once you become very familiar with how to sell it and you know talk to the client about it, you could see that actually having someone go off and do their test outside the service instead of bringing them in freed up a lot of space for clients that probably needed to come in, so it was sort of a realisation I think that the impact was initially quite big, but then you could get more efficient at asking the questions and it became more doable and then the service benefitted. (Staff #8)

The reason that it's so effortless and seamless is because [our IT person] was able to just build it in so we have a phone triage screen that we are using, tick boxes here and there, you know and you tick eligible to MyCheck and then you get the assessment, and if they decline, there are some boxes that you can choose what the reason might be and all of that you know, so it actually didn't take all that much longer once we, you know, got used to that process than our standard phone consultation would have taken. (Staff # 3)

Ethicality

Ethicality concerns whether the intervention aligns with a person's values.¹³

Clients

Ethicality, in this analysis, refers to clients' capacity to feel safe throughout the MyCheck process. For those who reported feeling vulnerable, or other feelings of unsafe experiences, this typically occurred while presenting at pathology centres – both in the waiting area and while meeting with the pathology collector. It should be noted that while negative experiences are focused on within this section, positive experiences were among the majority of pathology encounters. Some client participants described feeling at heightened risk of exposure

to judgment and stigma when presenting at mainstream pathology centres. Lack of technician's knowledge and skill regarding BBV/STI testing further compounded negative experiences when attending pathology services.

I did feel a bit judged going to like a normal pathology clinic where they may not know what the testing is for or why I am getting tested. [...] the person doing the testing didn't know what it was for or what – how it actually should be done so maybe that made me feel like they were a bit judgemental about stuff. (Client #4, male, negative result)

I finally went in [to pathology collection centre] and tried to go through the questions with the nurse that was doing the test. She really didn't know what she was talking about. I had to prompt her with the swabs that I needed and then she kept referring to like the vaginal swab as a genital swab and I was like 'this is really awkward', so I basically felt like not only was I kind of on edge and feeling a little bit you know I guess bit more visible in the world, [...] and then you know sort of have her kind of not knowing what I needed and me having to prompt her with the right language and all of that stuff was a bit ... like I just felt the whole thing was quite stressful. [...] I feel like the clinic [SSHC] is such a welcoming and safe space for workers [commercial sex] to come and to feel open about what you do, whereas like going to a mainstream service feels very exposed and very awkward. (Client #7, female, negative result)

Staff

While the above client experiences were not among the majority of encounters, these scenarios were not isolated incidents. SSHC staff recounted experiences of clients in which feelings of safety were compromised when presenting at pathology centres and/or interacting with pathology collectors.

As an example, that was actually related to me just yesterday, [...] they [a client] felt that the [pathology] staff were incredibly homophobic and weren't going to discuss anything related to genital or rectal anything or sex or you know literally anything and didn't give them the swabs to do, like, just wouldn't ... wouldn't do it. (Staff #3)

What happened with MyCheck is someone [...] who is a trans female, so male to female trans and she was ... when the results came through they were incorrect [...] and what had happened was the person had come in with their pathology form that this person was a trans female, but did not have a vagina or a neovagina [...] the person who had collected their – provided them their [swabs] saw

them and thought they were female and decided to write vaginal swab and only give them a vaginal swab, because that's what cis heterosexual females would do [...] and then it became a complication of us having to call the patient to try and find out, because the last thing you wanted to ask a trans person is their anatomy, because it's not relevant right. So, if it is not relevant to their care – and so yeah it was quite difficult to say who should we call first, because calling the lab we couldn't really rectify the situation to start off with and then calling the patient was going to be challenging because you just didn't want to cause offence. (Staff #2)

Intervention coherence

Intervention coherence refers to the person's understanding of the intervention.¹³

Clients

For clients, intervention coherence was apparent in their obtaining the electronic referral and presenting at pathology. This was generally regarded as 'straightforward' (Client #2, male, negative result). However, as Client #9 (male, positive result) indicates, intervention coherence may be challenged when presenting at pathology as some pathology personnel were unfamiliar with the MyCheck pathway. For first-time users of this service, it could be difficult to communicate the pathway to pathology collection personnel.

I went to the pathology centre and I showed them the bar code that Sydney Sexual Health Centre gave me and it was on the system which was good, but then I had to explain I guess what the MyCheck process was to the person which, for someone that had just heard of it that day, I didn't really know how to explain it that well to them. But the process itself of getting the pathology done was easy. I guess there was a bit of confusion between my understanding of what MyCheck was to the person, the pathologist doing it, I guess not knowing what I was talking about, I guess. (Client #9, male, positive result)

Staff

As direct implementors of the intervention, there was evidence of strong coherence among SSHC staff. However, as observed throughout the acceptability components, it is apparent that some implementors (i.e. third party providers – pathology collectors) were not always fully coherent of the intervention or its implementation processes. In the contractual agreement with the pathology provider, it was noted that MyCheck patient billing should be directed to SSHC (rather than Medicare, Australia's universal healthcare scheme), with a note included on the pathology requisition form detailing the billing process. Staff

perceived these billing misperceptions/errors by pathology providers as occurring frequently.

I guess what's happened is a lot of the patients that turn up to these places [pathology centres], especially those without Medicare, [...] it's like they [pathology collectors] haven't got the brief and they can't understand that the STI screen is being charged to Sydney Sexual Health and so a lot of people have been turned away for example and so they call up the results nurse [at SSHC] and they will be like 'I am standing in front of the pathology lab and I have my form and they won't do it for me because they say I have to pay.' (Staff #2)

Opportunity cost

Opportunity cost includes any additional costs (e.g. time, monetary) associated with participation in (client), or implementation of (healthcare personnel), the intervention.¹³

Clients

For clients, burden and opportunity cost substantially overlapped, with many participants describing the reduced burden of the MyCheck pathway, compared with standard care, as often being conceived as time saving via reduced travel and wait times, and cost-saving; e.g. not requiring city parking fees or reduced public transport costs.

Usually I would go via train, because it was in the city, Sydney Clinic, so I used to go always to the Sydney Clinic so it would take me 30–35–40 minutes in train and then I will go get the test and then I would come back. This one was like, again, because they have a franchise system for the pathology lab, it felt like maybe 5–10 minutes' drive [...] and it was located in the same mall where I usually do my groceries from, so like you know, will get my groceries done, get the test done as well. (Client #6, male, negative result)

For staff, there was little consideration of opportunity cost as no additional costs were incurred by staff to deliver the intervention. Perceived burden of increased workload associated with implementation of the intervention has been described under the sub-theme 'burden'.

Self-efficacy

Self-efficacy refers to how well a person is able to participate in an intervention.¹³

Clients

As noted in other components, participants broadly felt they were able to participate in the MyCheck pathway. Of note, a client who sought out STI testing following notification

from a partner, described being comfortable utilising the MyCheck pathway to undergo STI screening with anticipation of a positive result.

I mean fine, because a lot of STIs, they don't have a lot of symptoms, it's hard to know if you even have an STI, like without someone telling you that they have tested positive, so I felt fine, I didn't mind, like it hasn't had much of an impact physically on me, so to not go to a doctor, I was fine about that. I might have wanted to go to a doctor if I had symptoms or I had a more serious infection but because I hadn't, I was fine to just do the testing. (Client #9, male, positive result)

Other participants reported feeling competent to participate because they were familiar with routine BBV/STI testing and were accustomed to self-swabbing.

They simply said 'you know it's just a first pass urine test' so, and I mean, it's not something I am unfamiliar with, so it wasn't really a problem. (Client #5, male, negative result)

Staff demonstrated self-efficacy throughout other components of acceptability, notably describing burden of integration into workload and intervention coherence.

Discussion

Clients who completed BBV/STI testing via the MyCheck digital pathway, and staff involved in implementation of the MyCheck digital pathway, broadly perceived the intervention to be acceptable. Both clients and staff described positive feelings about participation in / implementation of the digital testing pathway ('affective attitude'). Among clients, the MyCheck intervention was regarded as reducing 'burden' of BBV/STI testing compared with standard care, with positive result clients regarding the digital testing pathway as reducing delay of engagement in sexual activities. Initial implementation of the MyCheck intervention initially increased workload 'burden' among staff, but this was overcome once integration became routine. Both clients and staff described interactions at pathology collection centres as influencing the intervention's 'ethicality'. Both participant groups largely described 'intervention coherence', although some issues arose when first utilising the new pathway. 'Opportunity cost' was viewed by clients as favourable owing to the reduced travel time through the ability to select a convenient collection site of their choosing. *Self-efficacy* was more prominent among clients familiar with self-swabbing; self-efficacy among staff was relayed throughout the other acceptability components.

An internet-based testing pathway, GetCheckedOnline, based in Vancouver, Canada, found that men who opted for

the digital testing pathway, compared with in-person presentation at a sexual health clinic, were more likely to be accustomed to routine testing, and selected the online pathway due to clinic wait times and distance to clinic.¹⁴ Similarly, clients within our study reported positive affective attitude of the MyCheck intervention due to its convenience and location choice (of pathology centre), and reduced burden associated with travel and wait times. Indeed, internet-based self-testing services have been found to be acceptable among users, largely due to the convenience and anonymity this type of service provides.¹⁵

Multimodal testing pathways have been viewed as a means to 'enhance' engagement with sexual health services and HIV/STI testing (p. 280).¹⁶ As noted by our participants, fostering client agency is a key component of effective engagement with sexual health care.¹⁷ Responses from staff participants suggest that STI digital testing pathways work best when provided as another testing option or offered as an alternative testing strategy rather than the only testing model, allowing for clients to self-select the option most suitable to them. Our findings, situated with the literature, demonstrate the eligibility criteria for MyCheck participation/referral are consistent with those clients who would likely feel most comfortable attending a pathology provider for routine testing.

One of the benefits of the MyCheck pathway is the reduction of barriers to testing, particularly for people who are Medicare-ineligible and/or those located in areas where publicly funded sexual health clinics are not easily accessible. There are a few private fee-based online/digital testing services available to people within Australia (and internationally); however, the out-of-pocket costs may be prohibitive for some patients.^{18,19} Despite efforts to revise the pathology requisition form to clearly denote cost burden of testing to be redirected to SSHC, several Medicare-ineligible clients experienced barriers to accessing BBV/STI testing when presenting at pathology centres. Publicly funded services seeking to scale up similar digital testing pathways should ensure clear communication with pathology providers to reduce disruption to service uptake among people who are ineligible for Medicare.

Patients accessing BBV/STI testing, for whatever reason, have the right to safe and judgment free health care. However, interactions with pathology providers impeded on the intervention's ethicality, as some participants relayed feeling unsafe or vulnerable to stigmatisation. Inadvertent harms experienced during engagement with health care is regarded as a 'global challenge' (p. 1).²⁰ De-stigmatising health care is crucial for patient engagement and retention.²¹ As was demonstrated by staff participants, the importance of pathology providers who can provide competent, gender-safe care for trans and gender diverse people is an important component of ethicality of any healthcare engagement, including BBV/STI testing.²² Stigma reduction strategies in healthcare settings would enhance positive health outcomes for people from

marginalised population groups.²³ Negative interactions during BBV/STI testing can inhibit future sexual healthcare engagement.²⁴ As such, sensitivity training of pathology providers regarding sensitivities associated with people accessing BBV/STI testing and specimen collection may improve patient safety when presenting at pathology collection centres. As many general practitioners refer to pathology services for BBV/STI testing, improving patient experience in the pathology setting would likely have broad impact for people accessing BBV/STI testing across NSW and nationally.

This study has several limitations. It was our intention to interview pathology personnel across some of the collection centres where participants had attended for specimen collection. Due to the extensive COVID-19 outbreak at time of data collection, coupled with interstate travel requirements of a negative polymerase chain reaction result, pathology personnel across the greater Sydney metropolitan area were heavily burdened with the increase in COVID-19 testing. As such, their participation in an interview was not possible. However, both clients and SSHC staff were able to reflect on personal and patient experiences of pathology attendance, which may have reflected greater nuance within patient experiences than perspectives of pathology workers who may have only encountered one or two patients via the MyCheck pathway.

Our research has demonstrated that digital testing platforms are broadly perceived as an acceptable healthcare intervention for BBV/STI testing among people routinely engaged in sexual health care. Effective interventions to enhance patient reach and enable greater access to digital testing pathways, including for those who are ineligible for Medicare or may have aversions to sexual healthcare engagement, are needed. The current design of MyCheck restricts enrolment to existing clientele. While this can facilitate clinical capacity planning and effective patient management including mitigating loss to follow up, the expansion of MyCheck is inherently dependent on having an existing clinical setting. Further research is needed to determine whether this model would be suitable for people who may be less familiar with routine BBV/STI testing (including self-collection), living in remote/regional areas, lacking access to stable internet/telecommunication connectivity, or those who have never tested for BBV/STIs in the past.

Conclusion

People who are accustomed to routine BBV/STI testing are likely more suitable candidates for digital testing pathways where specimen collection occurs at a pathology centre. Clients who may feel more vulnerable when presenting in the public health space, may be better suited to one-on-one care in a sexual health-specific setting, particularly where appropriate language around unique health needs are known

and used by care providers. While digital testing platforms offer greater convenience and patient autonomy for accessing routine BBV/STI testing, the ability for patients to choose is paramount to ensuring safe and appropriate care for all clients.

References

- 1 World Health Organization. Consolidated guidelines on HIV, viral hepatitis and STI prevention, diagnosis, treatment and care for key populations. Geneva: World Health Organization; 2022.
- 2 World Health Organization. Global health sector strategy on sexually transmitted infections 2016–2021. Geneva: World Health Organization; 2016.
- 3 ASHM. Australian STI management guidelines for use in primary care Sydney. Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine; 2022.
- 4 Commonwealth of Australia. Fifth national hepatitis C strategy 2018–2022. Canberra: Commonwealth of Australia; 2018.
- 5 Commonwealth of Australia. Eighth national HIV strategy 2018–2022. Canberra: Commonwealth of Australia; 2018.
- 6 Commonwealth of Australia. Fifth National Aboriginal and Torres Strait Islander blood borne viruses and sexually transmissible infections strategy 2018–2022. Canberra: Commonwealth of Australia; 2018.
- 7 Commonwealth of Australia. Third national hepatitis B strategy 2018–2022. Canberra: Commonwealth of Australia; 2018.
- 8 Commonwealth of Australia. Fourth national sexually transmissible infections 2018–2022. Canberra: Commonwealth of Australia; 2018.
- 9 Napoleon SC, Maynard MA, Almonte A, Cormier K, Bertrand T, Ard KL, *et al.* Considerations for STI clinics during the COVID-19 pandemic. *Sex Transm Dis* 2020; 47(7): 431–3. doi:10.1097/OLQ.0000000000001192
- 10 Contreras CM, Metzger GA, Beane JD, Dedhia PH, Ejaz A, Pawlik TM. Telemedicine: patient-provider clinical engagement during the COVID-19 pandemic and beyond. *J Gastrointest Surg* 2020; 24(7): 1692–7. doi:10.1007/s11605-020-04623-5
- 11 Golinelli D, Boetto E, Carullo G, Nuzzolese AG, Landini MP, Fantini MP. Adoption of digital technologies in health care during the COVID-19 pandemic: systematic review of early scientific literature. *J Med Internet Res* 2020; 22(11): e22280. doi:10.2196/22280
- 12 Gilbey D, Morgan H, Lin A, Perry Y. Effectiveness, acceptability, and feasibility of digital health interventions for LGBTIQ+ young people: systematic review. *J Med Internet Res* 2020; 22(12): e20158. doi:10.2196/20158
- 13 Sekhon M, Cartwright M, Francis JJ. Acceptability of healthcare interventions: an overview of reviews and development of a theoretical framework. *BMC Health Serv Res* 2017; 17(1): 88. doi:10.1186/s12913-017-2031-8
- 14 Gilbert M, Thomson K, Salway T, Haag D, Grennan T, Fairley CK, *et al.* Differences in experiences of barriers to STI testing between clients of the internet-based diagnostic testing service GetChecked Online.com and an STI clinic in Vancouver, Canada. *Sex Transm Infect* 2019; 95(2): 151–6. doi:10.1136/sextrans-2017-053325
- 15 Spence T, Kander I, Walsh J, Griffiths F, Ross J. Perceptions and experiences of internet-based testing for sexually transmitted infections: systematic review and synthesis of qualitative research. *J Med Internet Res* 2020; 22(8): e17667. doi:10.2196/17667
- 16 Tucker JD, Hocking J, Oladele D, Estcourt C. Digital sexually transmitted infection and HIV services across prevention and care continuums: evidence and practical resources. *Sex Health* 2022; 19(4): 278–85. doi:10.1071/SH22023
- 17 Llewellyn C, Pollard A, Miners A, Richardson D, Fisher M, Cairns J, *et al.* Understanding patient choices for attending sexually transmitted infection testing services: a qualitative study. *Sex Transm Infect* 2012; 88(7): 504–9. doi:10.1136/sextrans-2011-050344
- 18 MacKinnon KR, Mykhalovskiy E, Worthington C, Gómez-Ramírez O, Gilbert M, Grace D. Pay to skip the line: the political economy of digital testing services for HIV and other sexually transmitted infections. *Soc Sci Med* 2021; 268: 113571. doi:10.1016/j.socscimed.2020.113571
- 19 Ryan KE, Wilkinson AL, Asselin J, Leitinger DP, Locke P, Pedrana A, *et al.* Assessment of service refinement and its impact on repeat HIV

- testing by client's access to Australia's universal healthcare system: a retrospective cohort study. *J Int AIDS Soc* 2019; 22(8): e25353. doi:10.1002/jia2.25353
- 20 World Health Organization. Patient engagement: technical series on safer primary care. Geneva: World Health Organization; 2016.
- 21 Singer RB, Johnson AK, Crooks N, Bruce D, Wesp L, Karczmar A, *et al.* "Feeling Safe, Feeling Seen, Feeling Free": combating stigma and creating culturally safe care for sex workers in Chicago. *PLoS ONE* 2021; 16(6): e0253749. doi:10.1371/journal.pone.0253749
- 22 Haire BG, Brook E, Stoddart R, Simpson P. Trans and gender diverse people's experiences of healthcare access in Australia: a qualitative study in people with complex needs. *PLoS ONE* 2021; 16(1): e0245889. doi:10.1371/journal.pone.0245889
- 23 Broady TR, Brener L, Cama E, Hopwood M, Treloar C. Stigmatising attitudes towards people who inject drugs, and people living with blood borne viruses or sexually transmissible infections in a representative sample of the Australian population. *PLoS ONE* 2020; 15(4): e0232218. doi:10.1371/journal.pone.0232218
- 24 Gan J, Kularadhan V, Chow EPF, Fairley CK, Hocking JS, Kong FYS, *et al.* What do young people in high-income countries want from STI testing services? A systematic review. *Sex Transm Infect* 2021; 97(8): 574–83. doi:10.1136/sextrans-2021-055044

Data availability. This manuscript reports on qualitative data. To protect participant confidentiality, this data is not publicly available.

Conflicts of interest. The authors declare that they have no conflicts of interest.

Declaration of funding. The MyCheck pilot and this qualitative study were funded by New South Wales Ministry of Health.

Acknowledgements. We thank the SSHC client and staff participants for their generosity of time in participating in this qualitative sub-study. The Sydney Sexual Health Centre and NSW Sexual Health Infolink are funded by New South Wales Ministry of Health. The Kirby Institute and the Centre for Social Research in health are funded by the Commonwealth Department of Health and Ageing. The views expressed in this publication do not necessarily represent the position of the Australian Government.

Author affiliations

^AThe Kirby Institute, UNSW Sydney, Level 6, Wallace Wurth Building, Sydney, NSW 2052, Australia.

^BCentre for Social Research in Health, UNSW Sydney, Level 1, Goodsell Building, Sydney, NSW 2052, Australia.

^CUniversity of Johannesburg, PO Box 524, Auckland Park 2006, South Africa.

^DSydney Sexual Health Centre, South Eastern Sydney Local Health District, Level 3, Nightingale Wing, Sydney Eye Hospital, 8 Macquarie Street, Sydney, NSW 2000, Australia.

^ESTI Programs Unit, NSW Ministry of Health, 150 Albion Street, Surry Hills, NSW 2010, Australia.

^FThe Pacific Clinic, Level 2/670 Hunter Street, Newcastle West, NSW 2302, Australia.

^GNSW Sexual Health Infolink, NSW Ministry of Health, Locked Mail Bag 2030, St Leonards, NSW 1590, Australia.

^HCentre for Population Health, NSW Ministry of Health, Locked Mail Bag 2030, St Leonards, NSW 1590, Australia.