

[10.1071/SH24142](https://doi.org/10.1071/SH24142)

*Sexual Health*

### Supplementary Material

#### **Health provider perspectives on establishing service linkages for treatment and follow-up from an Australian, web-based STI testing service: a qualitative study**

*Teralynn Ludwick<sup>A,\*</sup>, Olivia Walsh<sup>A</sup>, Ethan T. Cardwell<sup>A</sup>, Christopher K. Fairley<sup>B</sup>, Jane Tomnay<sup>C</sup>, Jane S. Hocking<sup>A</sup>, and Fabian Y. S. Kong<sup>A</sup>*

<sup>A</sup> Melbourne School of Population and Global Health, University of Melbourne, Parkville, Vic, Australia.

<sup>B</sup> Melbourne Sexual Health Centre and Monash University, Melbourne, Vic, Australia.

<sup>C</sup> Centre for Excellence in Rural Sexual Health, University of Melbourne, Parkville, Vic, Australia.

\*Correspondence to: Teralynn Ludwick Melbourne School of Population and Global Health, University of Melbourne, Parkville, Vic, Australia Email: [Teralynn.Ludwick@unimelb.edu.au](mailto:Teralynn.Ludwick@unimelb.edu.au)

## Supplementary material file S1: Interview Guide

Topic: warm-up

1. Can you tell us a little about this SRH hub/clinic. What STI testing services do you currently offer? (cover HIV, syphilis, gonorrhoea, chlamydia). Who are the main clients that you serve? (prompt, majority under 30, CALD, Indigenous?). What is your staffing capacity? What is the availability of services, in terms of the number of days and times the clinic is open. Do you have waitlists? Do you bulk bill for your services? Do you prescribe HIV PreP?
2. In providing in-person STI testing services in [regional city], what do you perceive as the biggest challenges generally for your clinic specifically?
  - a. Prompt: to what extent do you have sufficient capacity to manage existing demand?
3. Explain nature of eSTI clinic.

Topic: referrals

4. Thinking about the services your clinic provides and the strengths and challenges of your clinic, are there ways in which you think the eSTI clinic will complement your services?
5. What do you see as the main points where eSTI clients could potentially interact with your services?

In the next questions, we'd like to get your perspective on how referrals at different points in the testing and treatment pathway might work

Topic: referrals for symptomatic

As I mentioned earlier, most users will be able to log on, answer some questions regarding sexual history, and then receive an electronic pathology form to bring to a pathology provider to complete their tests. However, if they report symptoms (other than discharge) while answering the online questionnaire, they won't be eligible to use the service. In this case, eSTI will recommend that they attend a clinic in person for assessment.

6. To what extent would your clinic be interested in receiving referrals of symptomatic clients from the eSTI clinic for further investigation?
  - a. Is there any information you would need from eSTI to consider the referral?
7. The MSHC has an online tool that uses an algorithm that assesses symptoms to identify the likelihood that a person has a particular STI - <https://www.staystifree.org.au/>. It is based on analyzing thousands of clinical case presentations. After making an assessment, the online tool provides a referral letter with a summary of information about the clinical presentation of the symptoms which users can print and bring to a GP office. This service is already available, but we are considering how we might integrate it into the online STI service.
  - a. If a client had a letter generated from this program, would you find it useful?
  - b. Would your clinic consider prioritizing them for a consultation? If yes, what might the prioritization process look like? What would be the challenges?

Topic: treatment referrals

Users will receive an SMS if their results are negative. If they are positive, we foresee three different service pathways depending on the STI. A) If positive for chlamydia: possibly a telehealth call and receive an e-prescription for oral tablets. B) If positive for HIV or syphilis, receive a phone call to bring into care at MSHC or be referred elsewhere to a specialist centre. C) If positive for gonorrhoea,

be sent a referral letter to bring to a GP or community health clinic for treatment as it will require injections to be given.

1. How would you feel about eSTI referring a patient to your care for syphilis or gonorrhoea management? What information would you want to receive about their diagnosis?
  - a. Would you want a phone call from a eSTI doctor to explain?
  - b. If a user had a letter from the online STI service that was authorized by the MSHC, would accept that letter and treat the client without needing to order your own tests?
    - Would you need to see the original pathology results?
    - What is needed to demonstrate the authenticity of letter?
2. Would it be possible to fast track a patient into your clinic for management? Would you want eSTI to generate a prescription for the treatment or would you prefer to issue that?
3. What is the capacity to administer injections for gonorrhoea or syphilis, in terms of staff and drug availability?
  - a. Do you normally stock any of these drugs? If you don't normally stock the injectable treatments, could you stock them? E.g.
    - Ceftriaxone 500mg vials
    - Ceftriaxone 1g vials
    - Lidocaine 1%, 5mL vials
    - benzathine benzylpenicillin 1.2MU (0.9g) – often in Doctor Bags
  - b. What would be the challenges of stocking them? What additional resources would you need?

Topic: System support

8. Overall, do you feel that receiving referrals from the online service would be advantageous or a burden for your clinic?
  - a. What friction points or challenges would you anticipate in creating and managing referral pathways?
  - b. What could support effective referral pathways?
  - c. Would you consider having your SRH hub included by us as one of the referral clinics for symptomatic clients or for those who need treatment? What would be some considerations?

Topic: promotion

9. Would your clinic be willing to promote the eSTI clinic to your clients? If yes, how? If no, what are some considerations?
  - a. Prompts:
    - i. Posters in windows/walls?
  - b. Would you consider letting young people know about the service when they make appointments for other health issues? Would you have any reluctance to refer to an online service?
10. Do you currently have any community outreach or awareness strategies in place to let people know about your services? Are there ways that we can promote and advertise our services for mutual advantage?

Topic: wrap-up

11. Any other comments or thoughts about how the eSTI clinic could work with your clinic and/or SRH hubs or community health in Victoria more broadly?

Consolidated criteria for reporting qualitative studies (COREQ): 32-item checklist			
No	Item	Guide questions/description	Response
<b>Domain 1: Research team and reflexivity</b>			
Personal Characteristics			
1	Interviewer/facilitator	Which author/s conducted the interview or focus group?	TL, OW
2	Credentials	What were the researcher's credentials? <i>E.g. PhD, MD</i>	TL holds a PhD OW holds an MPH
3	Occupation	What was their occupation at the time of the study?	TL is a research fellow in the Sexual Health Unit at the University of Melbourne  OW is a research assistant that supports the team
4	Gender	Was the researcher male or female?	TL and OW are women
5	Experience and training	What experience or training did the researcher have?	TL has published numerous qualitative studies. OW has completed qualitative training as part of her MPH and received guidance on interviewing by TL
Relationship with participants			
6	Relationship established	Was a relationship established prior to study commencement?	The participants did not have a prior relationship with the interviewers. Some participants have relationships with the Melbourne Sexual Health Centre.
7	Participant knowledge of the interviewer	What did the participants know about the researcher? <i>e.g. personal goals, reasons for doing the research</i>	Participants were told that the interviewers were part of a research team working with the Melbourne Sexual Health Centre to design and

			implement and online STI testing service in Victoria, Australia.
8	Interviewer characteristics	What characteristics were reported about the interviewer/facilitator? e.g. <i>Bias, assumptions, reasons and interests in the research topic</i>	The manuscript reports that this study was conducted as part of a larger effort to design and implement and online STI testing service in Victoria, Australia.
<b>Domain 2: study design</b>			
Theoretical framework			
9	Methodological orientation and Theory	What methodological orientation was stated to underpin the study? e.g. <i>grounded theory, discourse analysis, ethnography, phenomenology, content analysis</i>	Content analysis
Participant selection			
10	Sampling	How were participants selected? e.g. <i>purposive, convenience, consecutive, snowball</i>	We used purposive sampling to select clinicians working in sexual and reproductive health in regional and outer metropolitan areas where services are more limited. They were purposively selected based on our aims of building treatment pathways that promote equity in access and build on Victorian Government efforts to build capacity in sexual health services in these areas.
11	Method of approach	How were participants approached? e.g. <i>face-to-face, telephone, mail, email</i>	Invited by email
12	Sample size	How many participants were in the study?	16

13	Non-participation	How many people refused to participate or dropped out? Reasons?	No one dropped out. 15 clinics did not respond to our invitation to participate.
Setting			
14	Setting of data collection	Where was the data collected? <i>e.g. home, clinic, workplace</i>	Interviews took place online
15	Presence of non-participants	Was anyone else present besides the participants and researchers?	no
16	Description of sample	What are the important characteristics of the sample? <i>e.g. demographic data, date</i>	Nurse and GPs who are already engaged in SH services. Located in regional areas and outer metropolitan suburbs.
Data collection			
17	Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested?	The interview guide was not provided in advance. However the PLS provided an overview of the types of questions that would be asked. We tailored questions to be relevant to the situation of the respondent.
18	Repeat interviews	Were repeat interviews carried out? If yes, how many?	No
19	Audio/visual recording	Did the research use audio or visual recording to collect the data?	Interviews were audio recorded
20	Field notes	Were field notes made during and/or after the interview or focus group?	A set of field notes were collected and discussed after each interview.
21	Duration	What was the duration of the interviews or focus group?	Interviews were about 45 minutes long
22	Data saturation	Was data saturation discussed?	The sample size was limited by the number of SRH hubs and SH partner clinics in the state and the number of clinicians from these clinics who responded to our invitation

23	Transcripts returned	Were transcripts returned to participants for comment and/or correction?	No
<b>Domain 3: analysis and findingsz</b>			
Data analysis			
24	Number of data coders	How many data coders coded the data?	TL and OW coded the data
25	Description of the coding tree	Did authors provide a description of the coding tree?	No
26	Derivation of themes	Were themes identified in advance or derived from the data?	Derived from the data
27	Software	What software, if applicable, was used to manage the data?	Nvivo was used to code the data
28	Participant checking	Did participants provide feedback on the findings?	High level findings were shared with participants by email. No feedback was received.
Reporting			
29	Quotations presented	Were participant quotations presented to illustrate the themes / findings? Was each quotation identified? <i>e.g. participant number</i>	Yes
30	Data and findings consistent	Was there consistency between the data presented and the findings?	Yes
31	Clarity of major themes	Were major themes clearly presented in the findings?	Yes
32	Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes?	Yes