

Acceptability among healthcare workers and clinic managers of molecular point-of-care testing for *Trichomonas vaginalis*

Tangey A¹, Causer L¹, Guy R¹, Huang R², Ward J³, Smith K¹, Lafferty L^{1,4} on behalf of the TTANGO2 Investigators.

¹ Kirby Institute, UNSW Sydney, ² Nganampa Health Council SA, ³ UQ Poche Centre for Indigenous Health, University of Queensland, ⁴ Centre for Social Research in Health, UNSW Sydney



Introduction

In remote Aboriginal communities, there are high rates of Trichomoniasis (TV), along with other sexually transmissible infections (STIs), including chlamydia (CT) and gonorrhoea (NG). Delays in receipt of laboratory test results, population transiency, and access to appropriate primary health care services impact timely management.



The test and treat intervention of point-of-care testing (POCT) for CT/NG has broad acceptability among healthcare workers in remote communities¹; however, the acceptability of TV POCT has yet to be evaluated.

Aim

Utilising Sekhon's Theoretical Framework of Acceptability², this study explored healthcare personnel's perceptions of the acceptability of integrating TV POCT within an existing STI POCT program (TTANGO2) in remote Aboriginal health services.

Methods

Health service clinics representing each of the four jurisdictions participating in TTANGO2 were randomly selected and invited to nominate participants. Semi-structured in-depth interviews were conducted with 26 participants from 14 sites. Sekhorn's seven construct components provided a multifaceted framework to assess the acceptability of the TV POCT intervention.

Conclusions

Adding TV POCT alongside CT/NG POCT is an acceptable health intervention in remote health services. Healthcare workers described that simultaneously testing all three STIs at the point of care gave them the satisfaction of providing a "one stop shop" for the cascade of care of test, treat and trace. Integration of TV POCT alongside CT/NG POCT was viewed as enhancing patient care, improving test and treat pathways, reducing unnecessary treatments, and better streamlining workflow.

Acknowledgments

TTANGO2 is a collaboration between investigators, Aboriginal Health Council of Western Australia, Western Australia Department of Health, West Australian Country Health Service, Aboriginal Health Council of South Australia, South Australia Health, Northern Territory Health, Aboriginal Medical Services Alliance of Northern Territory, Queensland Aboriginal and Islander Health Council, Queensland Health, Kimberley Aboriginal Medical Services Council, The Poche Centre for Indigenous Health, Apunipima Cape York Health Council, Kimberley Aboriginal Medical Services, Ngaanyatjarra Health Service, Burnet Institute, Royal Women's Hospital, Melbourne, University of Queensland, Monash University, PathWest, National Reference Laboratory, and Medical Communication Associates. We acknowledge the contributions of TTANGO2 Investigator group and the TTANGO2 Executive group not otherwise named as co-authors on this abstract. We are grateful to Cepheid for their generous in-kind support with supply of GeneXpert devices and reduced-price assay cartridges.

The study would not have been possible without the commitment of all participating health services and their staff and our partners' ongoing support and advice.

This work was supported by RAPiD; funding from the Australian National Health and Medical Research Council (NHMRC Centre for Research Excellence grant number APP1135247).

This research is supported by an Australian Government Research Training Program (RTP) Scholarship.

Contact
Annie Tangey
atangey@kirby.unsw.edu.au

Results (preliminary)



Five components of Sekhon's acceptability framework contributed to the overall acceptability: **affective attitude**, **perceived effectiveness**, **ethicality**, **burden** and **self-efficacy**.

Affective attitude (how an individual feels about the intervention)

Participants' **affective attitude** was influenced by high levels of healthcare workers' satisfaction with the addition of TV to CT/NG POCT and integration into clinic workflows.

Before we had the [TV] cartridges when we were just doing chlamydia and gonorrhoea, you could treat someone for maybe two infections and then a week later, "oh gee, they did have Trich after all, so we're going to have to get them back in and give them a course of metronidazole" you know, rather than just one stop shop and get everything done. (#24)

Perceived effectiveness (the extent to which the intervention is perceived as likely to achieve its purpose)

POCT enhanced participants' ability to manage patients' positive STI (CT, NG and TV) test results more **effectively**, along with public health benefits.

You have a result right there and then, they can be treated right there and then, we can also get the contacts in very, very quickly. They can't re-infect people and look, it's not really medical, but I think if they're treated in the context of brought in, it's resolved. there's not that lingering follow-up. (#22)

Ethicality (the extent to which the intervention has good fit with an individual's value system)

Ethicality was embedded within the context of patient well-being. POCT enabled participants to diagnose and treat appropriately, compared to a syndromic approach whereby unnecessary medication may be provided, not only adding to the pill burden but also potential adverse effects.

There's so many tablets that you've actually got to give with that, and it just takes ages, and they cringe when they see them. So, that's another thing why I would wait for the results as well just so that I know what I'm treating (#16)

Burden (the perceived amount of effort that is required to participate in the intervention)

Simultaneously testing for 3 treatable infections (CT/NG/TV) was described as timesaving as it reduced the **burden** of additional patient and public health follow-up at a later time.

And to get a contact trace of the same day, as getting a result on someone that's come in that for example, is symptomatic, you know, wow, you've just saved so much time, and you're more likely to be able to catch up with that person rather than move to another community. So, you know, that's a massive advantage in itself. (#24)

During the COVID-19 pandemic, the POCT platform (GeneXpert) was prioritised for testing respiratory infections, thereby increasing the **burden** of STI POCT capacity.

It was a definite reality when COVID testing was being done. Yeah, you couldn't get in to use the [GeneXpert] machine for STI testing as much and, yeah, the whole room would be blocked off. You couldn't even leave the STI testing there to wait. There was a certain amount of frustration. (#14)

Self-efficacy (the participant's confidence that they can perform the behaviours required to participate in the intervention)

Self-efficacy was viewed as reducing the overall workload burden, with many participants noting that seamless integration of TV POCT enhanced workflow, thereby enabling timely patient management.

I tend to do most of my point-of-care at the beginning of the health assessment, and I get time, the machines doing the work while I'm actually with the client, and I've got results. So, when they go see the doctor, I've got most of my results there. (#22)

- Lafferty, L., et al., *Scaling up sexually transmissible infections point-of-care testing in remote Aboriginal and Torres Strait Islander communities: healthcare workers' perceptions of the barriers and facilitators*. *Implement Sci Commun*, 2021. 2(1): p. 127.
- Sekhon, M., M. Cartwright, and J.J. Francis, *Acceptability of healthcare interventions: an overview of reviews and development of a theoretical framework*. *BMC Health Serv Res*, 2017. 17(1): p. 88.