

Opportunities and challenges in implementing active syphilis point-of-care testing and self-testing: a qualitative study of Australian healthcare providers

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Introduction

- Syphilis remains a significant and growing public health concern in Australia. Diversification of sexual health service delivery models to improve access to testing and treatment is central to the syphilis response.
- Point-of-care tests (POCT) that can reliably distinguish active syphilis from past-treated infection have the potential to address existing barriers to timely syphilis diagnosis and treatment.
- The introduction of syphilis self-testing raises important questions about how it can be effectively integrated into existing sexual healthcare models.
- Understanding healthcare providers’ perspectives is essential to inform effective implementation of these emerging testing approaches.
- We explored healthcare providers’ attitudes toward integrating active syphilis POCT and self-testing into the Australian sexual health landscape.

Methods

- We conducted semi-structured interviews with a purposive sample of 15 healthcare providers across diverse settings relevant to the Australian syphilis response.
- Participants included 6 general practitioners, 3 nurses, 2 sexual health physicians, 2 peer testers, 1 nurse practitioner and 1 obstetrician-gynaecologist, predominantly from primary care, community health and sexual health services.
- Data were analysed using inductive thematic analysis.

Conclusion

- Healthcare providers supported targeted active syphilis POCT integration and careful implementation of syphilis self-testing.
- Participants viewed active syphilis POCT not as a tool for routine screening, but as a **targeted decision-making tool** in situations of **diagnostic uncertainty, anticipated loss to follow-up** and **service delivery constraints**.
- Successful self-test implementation will require **clear clinical guidance, low-cost, targeted distribution**, and **system-level support** for timely treatment and equitable linkage to care.
- Public health impact of emerging active syphilis tests will depend not only on diagnostic performance, but **deliberate integration into responsive, equity-oriented models of care**.
- Early investment in **clinical guidelines, primary care education** and **accessible treatment pathways** is critical.

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Results

Clinical, client and service delivery factors shaped anticipated utility of active syphilis POCT in health services

- Participants saw active syphilis POCT as a valuable addition to existing testing pathways, particularly in settings with limited capacity or where same-day diagnosis and treatment could reduce inequities in care.

“It would give us the ability to create a plan for adequate treatment on the initial day of assessment.”

- Use was envisioned on a case-by-case basis, shaped by clinical factors (e.g., diagnostic uncertainty, indication for presumptive treatment, previous infection), client factors (e.g., anticipated loss to follow-up, barriers to venipuncture), and service delivery factors (e.g., triaging, task shifting and nurse-led models of care, outreach, peer-based testing).

"Having that option would be really good...different ways of managing clients on a case by case [basis], be a bit more tailored to their needs, more person centred.”

Successful active syphilis self-testing implementation was viewed as dependent on equitable access and linkage to care

- Syphilis self-testing was broadly supported by participants, who envisioned that self-testing could address pitfalls or gaps in existing syphilis testing pathways, provided that equitable access and linkage to care could be ensured for priority populations.
- Participants emphasised the need for accessible follow-up pathways for individuals, as well as systems-level support to upskill the primary care workforce and decentralise syphilis treatment. This included need for clear clinical guidelines, workforce education, and strengthened sexual health networks that enable community-based management.

"I think GPs would need some more support."

- Confidence treating based on a positive syphilis self-test result varied across provider familiarity and experience with managing syphilis, however most providers emphasised the need institutional support and guidance from key organisations or peak professional bodies.

Anticipated benefits and pitfalls of active syphilis self-testing were specific to the populations and contexts they may be used

- Anticipated benefits included increasing autonomy and flexibility in routine syphilis screening for people with strong relationships to sexual health services, as well as diversifying screening options and treatment opportunities available to underserved populations.

“You've got people who overuse and people who underuse [health services] ... maybe the [syphilis self-test] would be good for both of those populations, but for different reasons.”

- Whilst syphilis self-testing was therefore seen as an opportunity to facilitate entry into and strengthen engagement with sexual health care, as well as redistribute demand on sexual health services, concerns included potential impact on comprehensive sexual healthcare engagement if used in isolation.

“It would be important for us to be able to teach people about the availability of these sorts of things, but also teach them about why they maybe shouldn't replace conventional testing.”