CSIRO PUBLISHING

RESEARCH PAPER
https://doi.org/10.1071/SH25055

SEXUAL HEALTH

An outbreak-driven emergency department screening program for syphilis in North Queensland's Aboriginal and Torres Strait Islander population

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Handling Editor:
Ian Simms

Received: 31 March 2025
Accepted: 3 September 2025
Published: 25 September 2025

Cite this: Moncrieff L *et al.* (2025) An outbreak-driven emergency department screening program for syphilis in North Queensland's Aboriginal and Torres Strait Islander population. *Sexual Health* **22**, SH25055. doi:10.1071/SH25055

ABSTRACT

Background. There is an ongoing syphilis outbreak in regional and rural areas of Australia, with Aboriginal and Torres Strait Islander peoples disproportionately represented in notification data. Innovative screening approaches are needed in healthcare settings frequented by at-risk communities. The emergency department (ED) was hypothesised to be an ideal location for screening Aboriginal and Torres Strait Islander peoples, who traditionally underutilise healthcare services. **Methods.** A quality improvement initiative introduced an opt-out syphilis screening program at the Townsville University Hospital ED. For Aboriginal and Torres Strait Islander clients aged 15–40 years, syphilis screening was automatically added to blood tests collected as part of routine care. A retrospective audit of the program assessed screening rates, diagnosis, linkage to treatment and contact tracing outcomes. **Results.** The program added 5471 tests for 3942 individuals within the target age range. Twenty-seven Aboriginal and Torres Strait Islander peoples were diagnosed with syphilis infections requiring treatment, indicating a 0.68% prevalence. The odds of untreated syphilis were significantly higher in the oldest age group (aged 36–40 years) compared with the youngest age group (aged 15–20 years; OR 3.88, 95% CI 1.05–14.40, $P = 0.04$). All diagnoses of late latent or syphilis of unknown duration ($n = 5$) were made in the oldest age group. One pregnant woman was diagnosed with early syphilis. All infections, except one, were successfully treated by sexual health services. **Conclusion.** The ED screening program effectively identified undetected syphilis cases in the Aboriginal and Torres Strait Islander population. This audit informed future adaptations to the program, including expanding the target age range and increasing the screening interval between tests. Similar ED syphilis screening protocols could be adopted by other hospitals in syphilis outbreak areas.

Keywords: Australian Aboriginal and Torres Strait Islander peoples, clinical audit, emergency service, mass screening, quality improvement, sexual health, sexually transmitted infections, syphilis.

Introduction

Syphilis, infection with bacteria *Treponema pallidum*, is a major growing public health concern in Australia, with 6443 cases reported in 2023, more than triple the recorded rate 10 years ago.[1] Aboriginal and/or Torres Strait Islander peoples are disproportionately represented in Australia's national notifiable diseases surveillance system, with notification rates seven times that of non-Indigenous people.[1,2] Aboriginal and/or Torres Strait Islander peoples are the Indigenous population of Australia.

Of greatest concern is the rise in infectious syphilis rates in women of reproductive age (15–44 years), which coincided with 20 congenital syphilis cases in 2023, the highest annual number since 1995.[1] Twelve of these congenital syphilis cases were Aboriginal and Torres Strait Islander infants, half of which resulted in death.[1]

The disproportionate case burden within the Aboriginal and Torres Strait Islander population may be exacerbated by their unique barriers to accessing health care. Experiences of systemic discrimination, culturally inappropriate care and reduced healthcare access, along with the intergenerational trauma of colonisation, culminates in reduced care-seeking behaviour in this population.[3] The Australian Institute of Health and Welfare reports the

average access to general practitioners relative to need decreases with remoteness for the Aboriginal and Torres Strait Islander population.[4] Nationally, Aboriginal and Torres Strait Islander peoples present to the emergency department (ED) for health care at a higher rate than non-Indigenous Australians (25 vs 13 per 1000, respectively).[5] Although screening programs traditionally reside in outpatient general practices, the reliance of Aboriginal and Torres Strait Islander patients on the ED for both routine and acute care necessitates a paradigm shift.

In the context of the outbreak in regional and rural areas of Queensland, the Northern Territory, Western Australia, and South Australia,[1] there is an ongoing need for innovative approaches to syphilis screening. The *National Syphilis Response Plan 2023–2030* calls for diversified models of sexual health service delivery to improve accessibility of syphilis testing,[6] and the *North Queensland Aboriginal and Torres Strait Islander STI Action Plan 2016–2021* emphasises offering screening in settings where at-risk communities are most likely to seek care.[7]

Typical ED practices often limit syphilis testing to those symptomatic with syphilis or other sexually transmitted infections (STIs), overlooking the fact that syphilis can remain asymptomatic for much of its course.

It was hypothesised that the Aboriginal and Torres Strait Islander population presenting to a regional ED was likely to have a high prevalence of asymptomatic syphilis, mirroring aforementioned local statistics, and would thus benefit from a universal, routine, opt-out screening program. This approach aims to identify otherwise undetected cases, while being cost-effective when weighed against the expenses associated with an untreated syphilis infection and its potential sequelae. The purpose of this clinical audit was to evaluate the program.

Materials and methods

Study setting and population

This program was conducted in the ED of Townsville University Hospital (TUH), a large urban tertiary hospital that serves as the sole public hospital in Townsville, North Queensland, with >82,000 annual ED visits.[8] The hospital also acts as the main referral centre for many surrounding rural and remote towns. Townsville's population comprises 9% Aboriginal and Torres Strait Islander peoples, according to the most recent census data.[9]

In November 2017, a 1-month pilot program was initiated at TUH ED, implementing opportunistic syphilis screening for all clients between the ages of 15 and 40 years, as a quality improvement (QI) activity. For all patients who received a blood test as a part of their routine care, syphilis screening was automatically added. During this pilot, 10% of Aboriginal and Torres Strait Islander clients had a reactive syphilis antibody, compared with 1% of non-Indigenous clients. Three new asymptomatic infections were identified among Aboriginal and Torres Strait Islander clients, whereas no new infections were detected in the non-Indigenous population (K. Edmondson, unpubl. report, 2018). These findings justified the continuation of the QI project, with targeted screening of the Aboriginal and Torres Strait Islander population commencing in December 2018, and remains an ongoing initiative.

All Aboriginal and Torres Strait Islander-identifying clients between the ages of 15 and 40 years who received a blood test in the ED and did not opt out were included. Those who were tested for syphilis by an ED physician during their admission or had other evidence of testing through the health service in the previous 6 months did not receive a test. This was to ensure the program met the screening criteria of patients being asymptomatic and avoid over-testing.

Utilising an implicit consent model, the program incorporated informative signs and pamphlets within the ED and patient rooms, offering patients the option to opt out if desired. This study was reviewed by Townsville Hospital and Health Service Human Research Ethics Committee, and granted an exemption from full ethics review, as it met criteria of a QI activity (reference numbers: HREC/17/QTHS/227 and EX/2022/QTHS/90148), with in-principal support from the Aboriginal and Torres Strait Islander Health Leadership Advisory Council.

Testing processes

Syphilis screening was performed using the reverse sequence algorithm to best detect untreated or incompletely treated syphilis and false positives (Fig. 1).[10] As defined by the Australian Department of Health, a diagnosis of early syphilis (includes primary, secondary and early latent) was made if the infection was acquired within the previous 2 years. All other positive cases of syphilis were late latent or syphilis of unknown duration.[11,12] Individuals with no documented history of a previous positive result or treatment, as well as those with a fourfold increase in reactive plasma reagin (RPR) titre from prior testing, were classified as true positives requiring treatment.[10] Clients with a positive enzyme immunoassay (EIA), negative RPR and history of appropriately treated infection were considered past infections. Those with positive tests and no history suggesting syphilis acquisition were re-tested with an additional RPR before categorised as biological false positives (BFP). If required, the syphilis registry was consulted to confirm the diagnosis of new and past infections. Clients with nonreactive initial EIA were categorised as true negatives.

Costs of the pathology tests and follow up were absorbed by the hospital itself, bundled into the patient encounter. Follow up of positive results was conducted by the Townsville Hospital Sexual Health Service to source further history, arrange treatment and contact tracing.

Data collection

Data were continuously collected in a dedicated Excel spreadsheet by the Sexual Health Service, including demographic

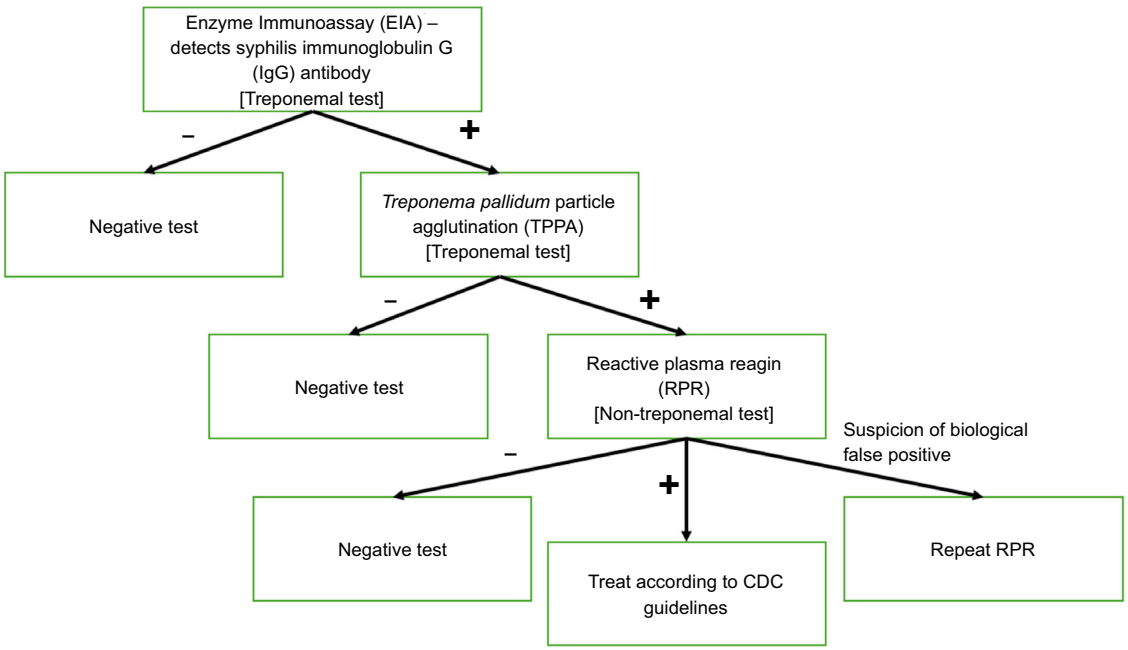

Fig. 1. Syphilis screening process using the reverse sequence algorithm.

information (age, gender, pregnancy status and ethnicity), results of screening and treatment outcomes. Quarterly internal reports were distributed to stakeholders. This study is a retrospective audit of the data from 3.5 years of the program (01/12/2019–30/06/2023) to examine rates of syphilis screening, diagnosis, linkage to treatment and outcomes of contact tracing. Because this was a QI intervention conducted in the context of routine clinical care, the research team received anonymised data stripped of all protected health information via the TUH data laboratory.

Data analysis

The analysis of data used descriptive statistics to outline the distribution of patient characteristics in the study sample. The proportion of syphilis cases requiring and receiving treatment were identified. Chi-squared tests were used to identify population differences; binary and multivariable logistic regression generated odds ratios, adjusted odds ratios, and confidence intervals (CIs) to examine factors associated with positive syphilis test. As the primary outcome was the number of people with new cases of syphilis detected in the cohort of Aboriginal and Torres Strait Islander peoples presenting to ED, the first positive or negative (in those who remained negative) test was included in the statistical analysis. Stata version 18 (StataCorp)[13] was used for these analyses. Other follow-up outcomes of positive syphilis cases are presented narratively.

A detailed cost-effectiveness analysis will be published separately (L. Moncrieff, unpubl. manuscript, 2025), with key findings briefly summarised in this study.

Results

Syphilis screening outcomes

During the study period, a total of 5481 tests were added-on and processed through the ED screening program. There was reduced screening from January to April 2022 due to the COVID-19 epidemic necessitating re-prioritisation of services and staffing. The program saw a total of 3950 individuals screened for syphilis at least once, 638 individuals screened twice, 198 individuals screened three times and 135 individuals screened four or more times. The maximum number of tests added-on for one individual was 10. The minimum interval between tests was 6 months by design.

The screened Aboriginal and Torres Strait Islander population, aged 15–40 years, was 39% male and 58% female. There was a relatively even distribution among age groups, and 275 tests were performed on pregnant women.

Of the initial EIA tests performed in this cohort, 322 were reactive requiring reflex *Treponema pallidum* particle agglutination and RPR. After further testing, 29 tests (for 27 people) were identified as syphilis infections requiring treatment. The distribution of these infections per quarter is shown in Fig. 2. Furthermore, 283 tests (for 192 people) were old syphilis infections not requiring treatment. Ten tests (for eight people) were identified as BFP, with seven of these clients requiring retesting with RPR to confirm BFP. The remaining client, who was tested three times through the program, did not require retesting with RPR, as they had a known past medical history of BFP and no new history of possible syphilis acquisition.

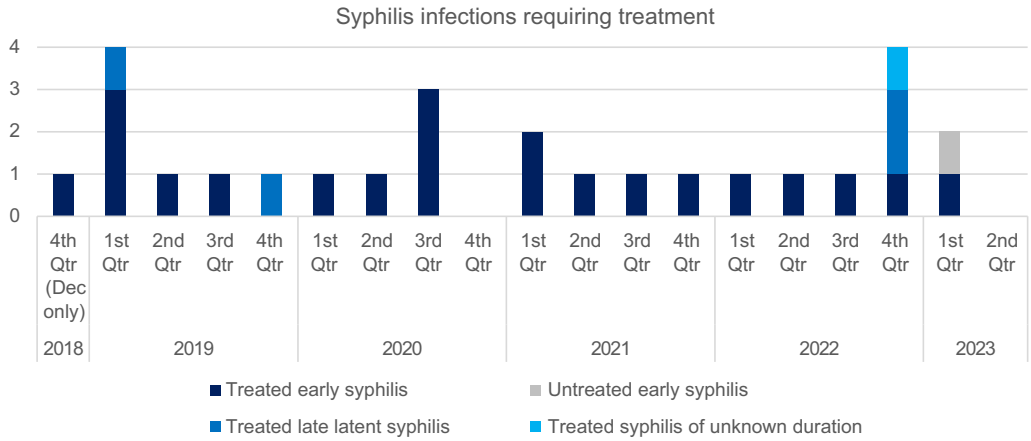

Fig. 2. Distribution of active syphilis infections in Aboriginal and Torres Strait Islander clients (aged 15–40 years), according to stage and treatment outcomes, diagnosed through add-on testing per quarter.

Twenty-seven Aboriginal and Torres Strait Islander peoples aged 15–40 years were diagnosed with syphilis requiring treatment (Tables 1, 2 and 3). This equates to a 0.68% prevalence of untreated syphilis in this cohort, and a 0.53% prevalence of untreated syphilis in all tests conducted. Of these positive cases, 16 out of 27 (59%) were women, and nine infections (33%) were in the age range 36–40 years. On binary logistic regression, the unadjusted odds of a new syphilis infection in age groups 26–30 years, 31–35 years and 36–40 years were significantly more than age group 15–20 years. However, when adjusted for gender, only age group 36–40 years remained significant. The odds of a new syphilis infection in age group 36–40 years was 3.88 times the odds in age group 15–20 years (95% CI 1.05–14.40, $P = 0.04$).

Twenty-two people were diagnosed with early syphilis, four with late latent syphilis and one with syphilis of unknown duration, which was identified as receiving previously incomplete treatment. All diagnoses of late latent syphilis and syphilis of unknown duration ($n = 5$) were made for the eldest age group, 36–40 years. One pregnant woman (age 36–40) was identified as having early syphilis.

Only one person (21–25 man) with early syphilis diagnosed in January 2023 remains untreated, as he returned to a remote location after testing positive. All other syphilis infections were treated successfully by sexual health services (Fig. 2). During the program, no one was successfully treated for syphilis then retested positive again.

Two people tested positive twice for the same syphilis infection, as they were not treated in the interim between ED

Table 1. Demographic characteristics by requirement for syphilis treatment among Aboriginal and Torres Strait Islander clients aged 15–40 years screened for syphilis in the emergency department.

	Patients with syphilis requiring treatment (%)	Patients not requiring treatment (%)	Chi-squared *P*-value
n (%)	27 (100)	3915 (100)	
Sex[A]			
Male	11 (40.70)	1530 (39.08)	0.977
Female	16 (59.30)	2251 (57.50)	
Age at enrolment (years)			
15–20	3 (11.11)	957 (24.44)	0.298
21–25	4 (14.81)	677 (17.29)	
26–30	7 (25.93)	940 (24.01)	
31–35	4 (14.81)	591 (15.10)	
36–40	9 (33.33)	750 (19.16)	

[A]A total of 134 items of missing data.

Table 2. Demographic characteristics by test result among Aboriginal and Torres Strait Islander clients aged 15–40 years screened for syphilis in the emergency department.

	Non-reactive	Early syphilis	Late latent/ unknown duration syphilis	Old reactive not requiring treatment	Biological false positive	Chi-squared *P*-value
Sex[A]						
Male	1464	7	4	64	2	0.313
Female	2142	15	1	104	5	
Age at enrolment (years)						
15–20	938	3	0	18	1	<0.001
21–25	654	4	0	21	2	
26–30	905	7	0	33	2	
31–35	544	4	0	47	0	
36–40	689	4	5	58	3	
Age at enrolment dichotomised (years)						
15–30	2497	14	0	72	5	<0.001
31–40	1233	8	5	105	3	

[A]A total of 134 items of missing data.

Table 3. Odds ratios and adjusted odds ratios for demographic characteristics of patients with syphilis requiring treatment compared with patients not requiring treatment.

	Odds ratios (95% CI)	*P*-values	Adjusted odds ratios (95% CI)	*P*-values
Sex[A]				
Male	1.011 (0.47–2.19)	0.977	0.98	0.965
Female	1.00 (ref)		1.00 (ref)	
Age at enrolment (years)				
15–20	1.00 (ref)		1.00 (ref)	
21–25	1.76	0.053	1.90 (0.42–8.53)	0.40
26–30	1.98	0.011	2.40 (0.62–9.30)	0.21
31–35	4.00	<0.001	2.17 (0.48–9.75)	0.31
36–40	4.33	<0.001	3.88 (1.05–14.40)	0.04

[A]A total of 134 items of missing data.

visits. One of these clients, a man in age group 35–40 years, was diagnosed with late latent syphilis twice through the program, in March and October 2019, and was eventually treated by outreach sexual health services. The other client, a woman in age group 35–40 years, was first diagnosed with early syphilis through add-on testing in March 2022, was initially lost to follow up, tested positive again through the program in October 2022 and finally treated for late latent syphilis in May 2023. Both infections were therefore regarded as late latent syphilis in data analysis. They are displayed in the quarter of their second positive test in Fig. 2, as this is closer to their actual treatment date.

In comparison, during the same period, ED physicians ordered 178 syphilis tests for the defined cohort, so automatic add-on tests were not processed for these patients. These patients were presumably symptomatic for syphilis or high risk, as assessed by the treating physician. Four diagnoses of syphilis requiring treatment were made from these tests (one man, three women, two pregnant) and all were treated in the emergency department.

Contact tracing and other outcomes

Eleven people who were known contacts of syphilis, and 16 people known to be due for syphilis post-treatment testing, received testing through the add-on program.

Outside of the program, at least 25 additional people (includes Aboriginal and Torres Strait Islander and non-Indigenous peoples) were tested as contacts of the syphilis cases above. At least 13 additional syphilis infections were diagnosed through this contact tracing activity. The demographics and treatment outcomes of these cases are not completely known due to loss of data over 2020–2021 from the impact of COVID-19, and some of these patients were managed by other health services and the data is not available.

Cost-effective analysis

Based on the widely referenced standard of $50,000 per quality adjusted life years (QALYs) threshold being indicative of acceptable cost-effectiveness in Australia, the ED screening program was not cost-effective in the discounted base case analysis compared with no screening with an incremental cost-effectiveness ratio (ICER) of A$134,802 per QALY gained. The ICER per case detected and treated was A$28,913. In comparison, the undiscounted cost analysis revealed an ICER of A$16,521 per QALY gained, and A$19,846 per case detected and treated. This substantial difference arises as preventive health interventions incur most costs upfront, whereas benefits – avoided complications – accrue over time, meaning discounting future QALYs significantly inflates the ICER. Further details of the cost-effective analysis results will be published elsewhere (L. Moncrieff, unpubl. manuscript, 2025).

Discussion

The cohort of Aboriginal and Torres Strait Islander peoples (aged 15–40 years) presenting to a regional ED demonstrated a high rate of untreated syphilis infection of 0.68%, compared with the national Aboriginal and Torres Strait Islander population prevalence of 0.158% in 2023.[1] This highlights the ongoing outbreak of syphilis in North Queensland and the increased likelihood of undiagnosed infection in this population. The rate exceeds the Centre of Disease Control's recommendation for routine opt-out screening for HIV, a similarly high morbidity disease, at a threshold of 0.1% prevalence of undiagnosed infection.[14] Modelling studies have demonstrated HIV screening is cost-effective, even at this low prevalence rate.[15–17]

Twenty-six syphilis cases, including 21 early syphilis cases, were successfully treated as a direct result of the ED screening program, with an additional 13 syphilis cases identified through contact tracing activities. Early treatment of syphilis is important to reduce further transmission and complications, including adverse pregnancy outcomes.[18]

Syphilis screening guidelines target the pregnant, HIV-positive and men who have sex with men populations.[19–21] However, the recent rise in syphilis cases among women of reproductive age and congenital syphilis cases suggests that this group should be included in screening recommendations, despite not being traditionally considered as high risk.[1] In this study, 57.5% of the screened population were women, with 275 tests conducted on pregnant women. This figure is likely an underestimation, as some women may have been in early pregnancy or chose not to disclose their pregnancy during their ED visit.

Aboriginal and Torres Strait Islander women are less likely than their non-Indigenous counterparts to attend antenatal care at the recommended time and frequency.[22] In 2020, the proportion of Aboriginal and Torres Strait Islander mothers

who attended antenatal care in the first trimester of pregnancy was 8.4 percentage points lower than that for non-Indigenous mothers.[23] Performing universal syphilis screening for this population in the ED could be instrumental in averting cases of congenital syphilis and facilitating linkage to appropriate antenatal care.

Australian STI guidelines recommend regular syphilis testing for Aboriginal and Torres Strait Islander peoples aged <30 years.[24] This study identified a significantly higher odds of untreated syphilis among the oldest age group (35–40 years) in the study population. All cases of late latent syphilis and syphilis of unknown duration were found within this group. This included two individuals who were initially lost to follow up and tested twice through the program before being treated for late latent syphilis. The absence of treatment elsewhere during this interim period supports the potential gap in access to primary care among this population, or possible oversight of syphilis screening by general practitioners when care was sought for other medical complaints. Expanding the targeted age range to include individuals up to age 50 years may uncover more undiagnosed infections. However, this needs to be balanced against the potential impact on cost-effectiveness and laboratory workflow.

All syphilis cases, except for one case of early syphilis, received treatment. It is likely that the untreated client will revisit the ED in the future, providing a new opportunity for re-screening, treatment and subsequent follow up, akin to the other two cases that were initially lost to follow up.

The frequency of syphilis screening in this population remains uncertain and ideally should be guided by risk factors, including sexual preference and HIV status, which is challenging in the ED setting.[19,20] Given that no clients tested positive for new syphilis infections twice with the current 6-month screening interval in place, it may be reasonable to extend this interval.

Numerous reported barriers to implementing HIV screening in the ED reflect those likely to be encountered in syphilis screening efforts. Emergency physicians cite issues of competing priorities, inadequate time and concerns regarding follow-up care for patients testing positive.[25,26] In this ED screening program, test orders were automated (i.e. auto-populated at triage) without needing a physician's signature or staff involvement. These tests were only processed if blood samples were already collected as part of routine patient care, saving the time required for an additional blood draw, albeit potentially missing syphilis cases among clients who did not have blood samples taken. Notably, the laboratory did not experience any workflow issues when processing the additional syphilis tests because of the relative low volume. The reverse sequence algorithm, with EIA as the initial test, was especially advantageous, as it is cheap and compatible with automation.[27]

Timely follow up for clients who screened positive was handled by the hospital's sexual health team, alleviating burden on the ED physicians. This approach ensured comprehensive STI care and linkage to necessary services at the time of follow up.

During the pilot period in November 2017, a proactive method of obtaining consent for screening was initially attempted. However, many barriers were identified by staff, resulting in very few tests being conducted. In the context of the current syphilis outbreak, it was determined that a routine screening model utilising implicit consent was necessary to ensure more testing occurred without placing undue burden on staff (K. Edmondson, unpubl. report, 2018). The opt-out testing strategy has been shown to increase test acceptance and diagnoses in HIV and syphilis screening programs.[28–30] A recent Australian study reported that switching from a risk-based to opt-out syphilis screening model for women in an outpatient sexual health clinic significantly increased the detection of asymptomatic late latent syphilis.[30] This project had similar results, uncovering numerous late latent syphilis infections in the oldest age group that might have otherwise gone undetected.

A key aspect of the implicit consent model was recognising that patients are rarely informed about tests performed during their ED visit, under the assumption that testing has been deemed necessary by the treating clinician and results will be managed appropriately. Numerous posters and pamphlets were made visible to patients, informing them of the program and how to opt out. Education was also provided to ED staff, including Indigenous Liaison Officers, to ensure they were comfortable addressing clients' queries about the program. Additionally, Indigenous Liaison Officers were involved with helping coordinate treatment and contact tracing if patients identified with syphilis were admitted to hospital. During the study period, no complaints were received by the sexual health department from either clients or doctors about the program, and no patients refused to have a syphilis test.

A pivotal factor in the program's success was the support from key stakeholders, including the ED and laboratory staff, sexual health clinicians, Aboriginal health service groups, information technology department, and hospital leadership. Consultation with the Aboriginal and Torres Strait Islander Health Leadership Advisory Council and Indigenous Liaison Officers ensured the screening model and patient information materials were culturally safe and acceptable. This collaborative approach with all stakeholders in the design and implementation of the screening procedures fostered ownership and aligns with the *Fourth National Sexually Transmissible Infections Strategy 2018–2022*, which emphasises community-led culturally appropriate responses to reduce syphilis incidence.[31]

The program aligns with the objectives of the *National Syphilis Response Plan 2023–2030*, which highlights the importance of expanding testing and treatment opportunities through alternative models of care.[6] Although this study examines only one geographic area, the results are likely generalisable to other regional and rural communities in

Australia experiencing a syphilis outbreak. More broadly, the principles of an opt-out ED screening program could be adapted to international outbreak settings, where vulnerable populations rely on the ED as their source of primary care, including low-income individuals, illicit drug users and commercial sex workers.

Other ED syphilis screening programs have been successfully conducted in the US.[32–37] Larios Venegas *et al.*[32] screened patients who presented with certain STI symptoms or risk factors and found a 1.2% prevalence of syphilis. Comparatively, Stanford *et al.*[33] and Sweitzer *et al.*[34] implemented universal screening for adult patients, finding a 1.1% and 3% prevalence, respectively, with most positive clients presenting with complaints unrelated to STIs.[33] These outcomes suggest that targeted screening based on behavioural risk factors or STI symptoms can miss many cases, whereas universal screening was more effective in identifying asymptomatic patients.

Different approaches have been used to enhance syphilis surveillance in EDs, including implementing electronic standardised screening recommendations for patients being tested for other STIs or those hospitalised with serious injection-related infections.[38,39] Implementing successful, feasible and cost-effective interventions has the potential to combat the syphilis outbreak by enhancing syphilis detection, leading to prompt treatment, improved patient outcomes and reduced transmission.[40]

Limitations

As this was a QI intervention, the data did not include some variables, such as sexual preference and reason for presenting to ED, which could have provided more insight into the risk factors for syphilis infection in this population. It is unclear whether the individuals were truly asymptomatic, as full history and examinations were not conducted in the ED. For the same reason, the exact stage of syphilis could not be determined, and was categorised broadly into early and late syphilis.

Due to time limitations, private syphilis laboratory results were not checked before the test was added-on, only those in the hospital system were considered. This could have led to repeat testing within the designated screening interval.

Conclusion

Overall, this opt-out screening program was successful in identifying undetected syphilis cases in the Aboriginal and Torres Strait Islander population presenting to TUH ED. Future adaptations to the program include increasing the inclusion criteria to individuals aged up to 50 years and increasing the screening interval between tests. Regular evaluation of the program is required to ensure its continued effectiveness. Other hospitals in outbreak regions could benefit from adopting similar syphilis screening protocols in their ED to effectively serve comparable populations. The success of the opt-out strategy in this context suggests its potential for broader application in other healthcare settings. Furthermore, expanding the role of the ED in public health efforts should be encouraged, provided interventions are automated, streamlined and have strong stakeholder support.

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Data availability. All data generated or analysed during this study are included in this published article.

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

Declaration of funding. This research did not receive any specific funding.

Acknowledgements. The authors acknowledge Dr Raj Sehdev, Townsville University Hospital emergency physician, for his early involvement in the project.

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