Point-of-Care Testing in ACCHOs

Bianca Borgnolo *on behalf of the First Nations Molecular POC Testing Program*

The Kirby Institute

AH&MRC Aboriginal Health & Medical Research Council of NSW

Deadly Doctors FORUM 2026



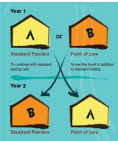
ALWAYS WAS ALWAYS WILL BE ABORIGINAL LAND

I want to acknowledge and pay my respects to the Traditional Custodians of the unceded lands of the Bidjigal people, where we are meeting today.
I want to pay my deepest respects to their Elders, past and present, as they hold the stories and customs of these lands.
I would also like to extend that respect to all Aboriginal and Torres Strait Islander Peoples here today.

Artwork titled:
Walking Together for Infectious Disease
Artist: Mel Fernando, a proud Wiradjuri, Kamilaroi, Gungurri & Euahlayi Woman from Dubbo in Western NSW, currently living and working on Birpai Country.

First Nations Molecular Point -of-Care Testing Program

12 clinics
2013-2015



STI* POC RCT (TTANGO)

31 clinics
2016-2019

STI* POCT Program (TTANGO 2)

49-75+ clinics
2020-2023

STI* POCT Program (TTANGO 3)

80 clinics

Respiratory POCT** Program

Projects:
Strep A & HPV
Workforce, resp, STIs

RART: Scale up POCT for infectious diseases ****

First Nations Molecular POC Testing Program **

Chlamydia & Gonorrhoea POC lab & field evaluations

2012 → 2013 → 2016 → 2020 → 2021 → 2024

HCVPOCT

*STI, Sexually Transmitted Infections Program = chlamydia, gonorrhoea, trichomonas (added 2018)
**Respiratory Program = SARS-CoV-2, + influenza A, B and RSV all added 2022
***Rapid Applied Research Translation = HPV and Group A Strep demonstration studies, workforce model, respiratory evaluation
**** HCVPOCT = National Research Program

The Journey so Far

POC tests delivered

Year to date: 154,653

Respiratory: 96,885

STI: 56,000

Strep A: 1,169

Positivity

Respiratory: 20%

STI: 22%

Strep A: 23%

Program network

88 operational health services

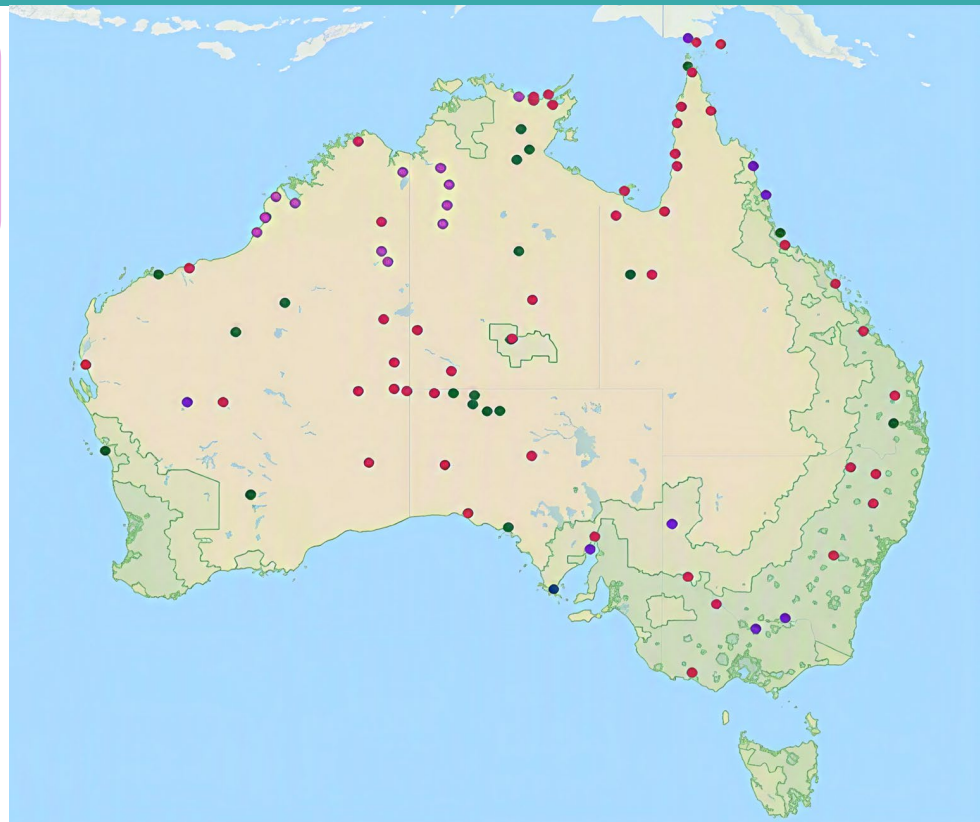
54 delivering Respiratory, STI, and Strep A testing

24 delivering STI testing only

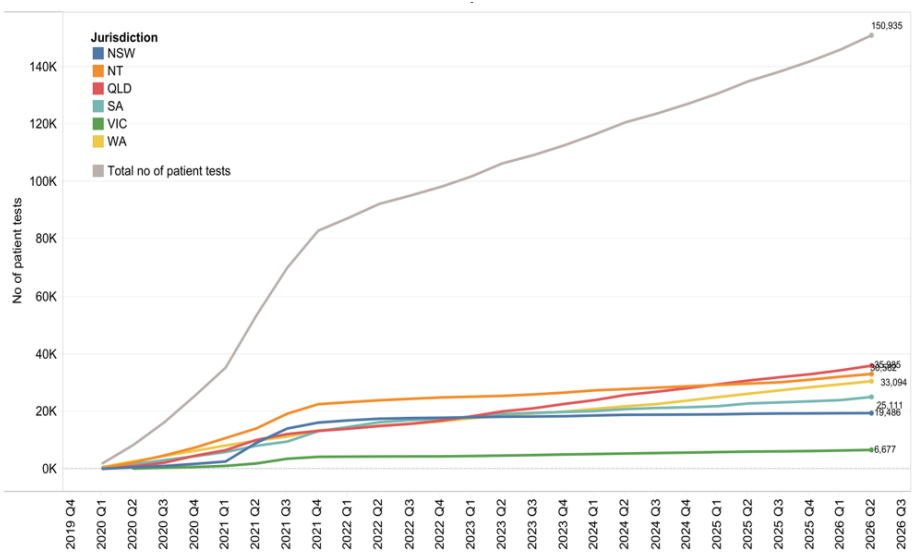
10 delivering Respiratory testing only

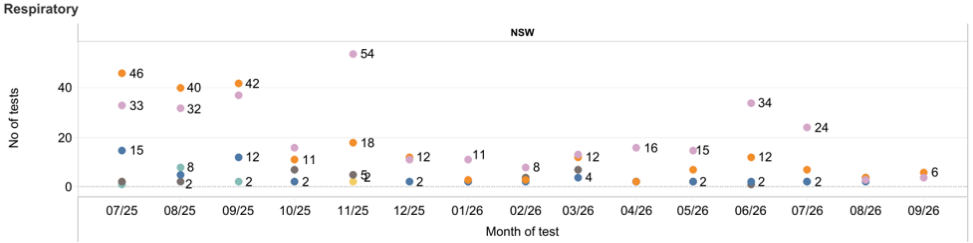
Population reach

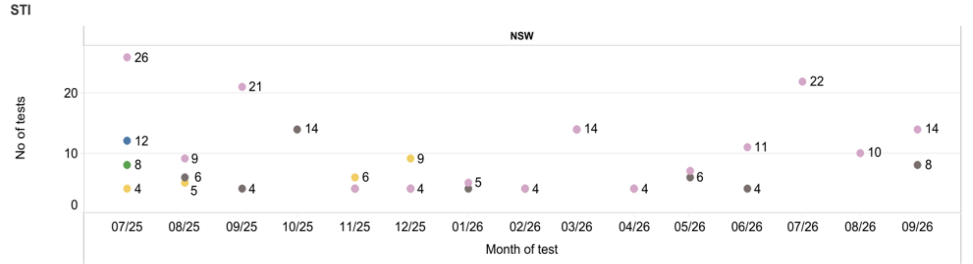
	First Nations People	Remote areas
Respiratory	74%	92%
STI	96%	92%
Strep A	94%	100%



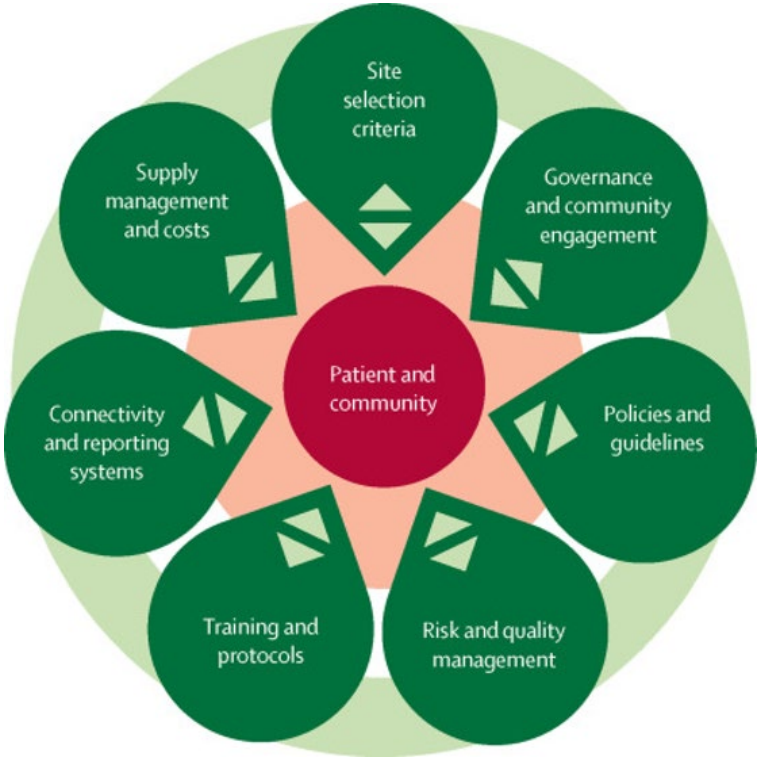
NSW in context: Testing numbers over time







Molecular Point -of-Care Testing





Molecular Point -of-Care Testing in Practice



Primary care settings



Community screening events



Mobile/outreach testing



Acute care settings

Benefits of POC Testing in Aboriginal Community Controlled Primary Health Settings

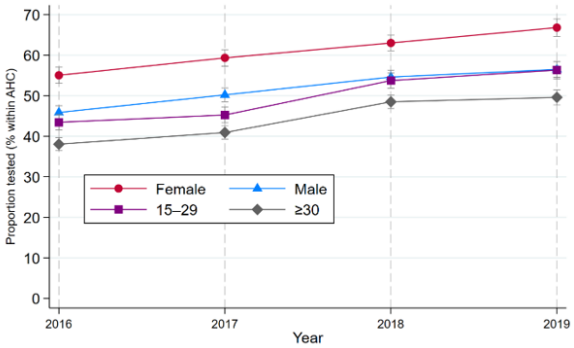


Impacts of POC Testing on STI Testing Uptake and Treatment

Impact on STI testing **uptake**

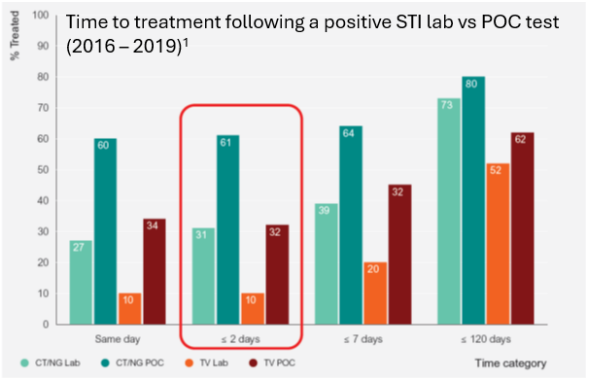
- ✓ Increased STI testing overall[2]
- ✓ Increased STI testing in adult health checks[3]

Uptake of chlamydia and gonorrhoea testing during adult health checks (2016–2019), overall and by sex and age group[3]



Impact on STI **treatment**

- ✓ Increased % treated and cured (2-3 fold) [1,3]
- ✓ Reduced median time to treatment
  - ✓ CT/NG faster by 10 days
  - ✓ TV faster by 25 days



[1]Causer et al. The Lancet Regional Health - Western Pacific, 2024; [2]Tangey et al. IUSTI 2024; [3]Monaghan et al. Unpublished; [4] Watts et al. IUSTI 2024

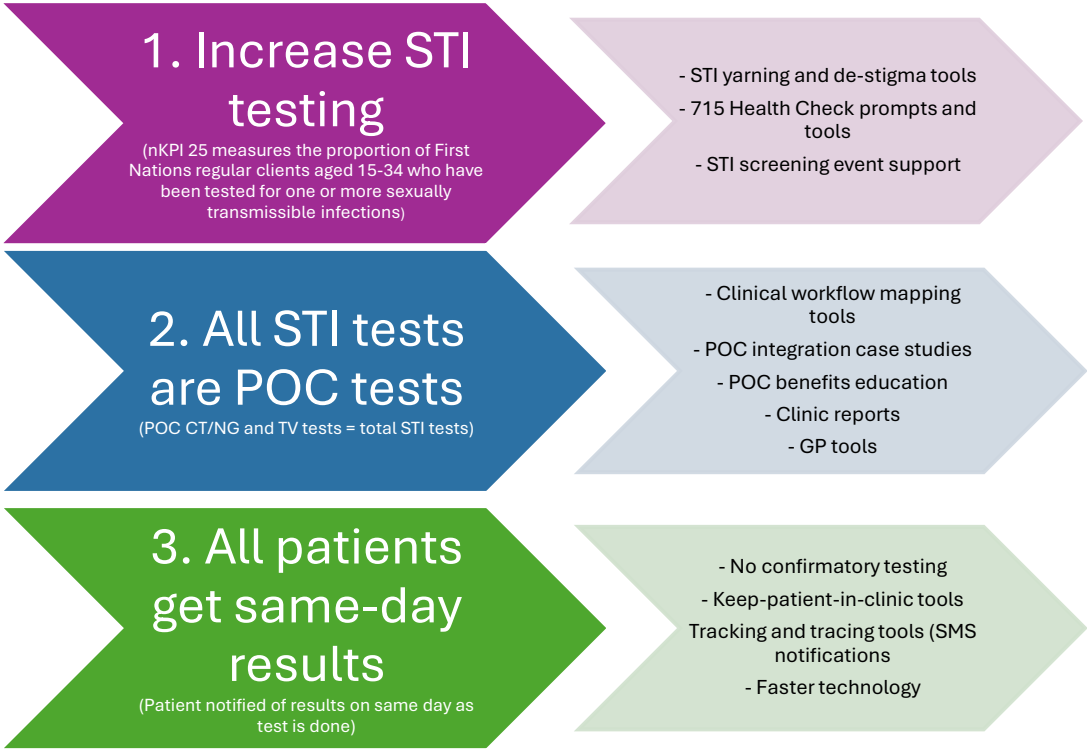
Impacts of Molecular STI POC Testing



- >118,000 infectious days averted[4]
  - Fewer onward transmissions
  - Reduce complications of untreated STIs
- More cost-effective than lab testing
- Medicare Benefits Scheme Item 73813 (POC CT/NG + TV)

[4]Causer LM, Smith K, Saha A, Tangey A, Shephard M, Andrewartha K, Matthews S, Duncan G, Guy R on behalf of the First Nations Molecular POC Testing Program. TTANGO2 Evaluation summary report for health services (2016 – 2024). July 2025. Kirby Institute UNSW

Clinical Integration Framework for Impactful STI POC Testing



Optimising POCT Workflow to ensure patients receive results in the same visit

1 PATIENT ARRIVAL

Patient arrives at the clinic.

2 TRIAGE & INITIAL CONSULT

Nurse triage and initial clinical assessment.

3 SAMPLE COLLECTION & POC TESTING

Sample collected and Xpert test started.

POC TEST RUNS IN THE BACKGROUND

STI: 90 mins | Respiratory: 35 mins

4 GP CONSULTATION

Patient consult with GP while POC test runs.

5 RESULTS, TREATMENT & FOLLOW-UP

Result available → treat if required → follow-up plan

HCV POCT

Australian Hepatitis C Point-of-Care Testing Program

HCVPOCT
National Australian Hepatitis C Point-of-Care Testing Program



- 112 active sites
- 542 operators trained for point-of-care HCV testing
- 80,824 HCV point-of-care tests (RNA: n=46,142; antibody: n=34,682)
  - Community: 30,218 people received testing (8% RNA prevalence)
  - Prisons: 42,420 people received testing (11% RNA prevalence)
- 6,521 people with current HCV infection
- Treatment uptake 67% overall (52% in community and 78% in prison)

- Funded in 2021 to establish a national HCV point-of-care testing program, currently funded until June 2029
- Drug treatment clinics, NSPs, prisons, mental health, mobile outreach models, homelessness services
- Testing for anyone at risk of HCV or attending service
- HCV antibody testing reflex RNA for antibody positive people, immediate HCV RNA testing for people with previous HCV infection
- Program includes:
  1) SOPs, logistics, deployment, and set-up
  2) Training
  3) Quality assurance program
  4) IT/connectivity
  5) Research and evaluation framework

Finger stick point-of-care HCV antibody testing (1-5 minutes)



Finger stick point-of-care HCV RNA testing (60 minutes)



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Additional assays

- **HPV** – working with NACCHO and ACPCC to support the HPV POCT rollout
- START **Strep A** – currently piloted at 13 sites
  - First patient test run in May 2025
  - 1219 POC tests run across all health services in the Program, 23% positivity
  - Largest proportion of tests among 5-15 year olds (42%)
- **TB** – worked with a site to support a community screening

Additional assays

- Xpert Respiratory Panel (XRP)
  - Viruses:
    - Adenovirus
    - Coronavirus (seasonal)
    - SARS-CoV-2
    - Human Metapneumovirus
    - Human Rhinovirus/Enterovirus
    - Human Parainfluenza,
    - Influenza A,
    - Influenza A H1N1 2009,
    - Influenza B
    - Respiratory Syncytial Virus
  - Bacteria:
    - Bortadella pertussis
    - Bordetella parapertussis
    - Mycoplasma pneumoniae
    - Chlamydophila pneumoniae

