



COVID-19 POC testing in remote Aboriginal and Torres Strait Islander Communities: informing a community-led response in an uncertain environment

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On behalf of Ngaanyatjarra Health Service and
Aboriginal and Torres Strait Islander COVID-19 POCT Program Team & collaborators

Artwork by Rickesha Burdett, a Noongar woman from the Menang Region of WA currently living in the Whadjuk Country

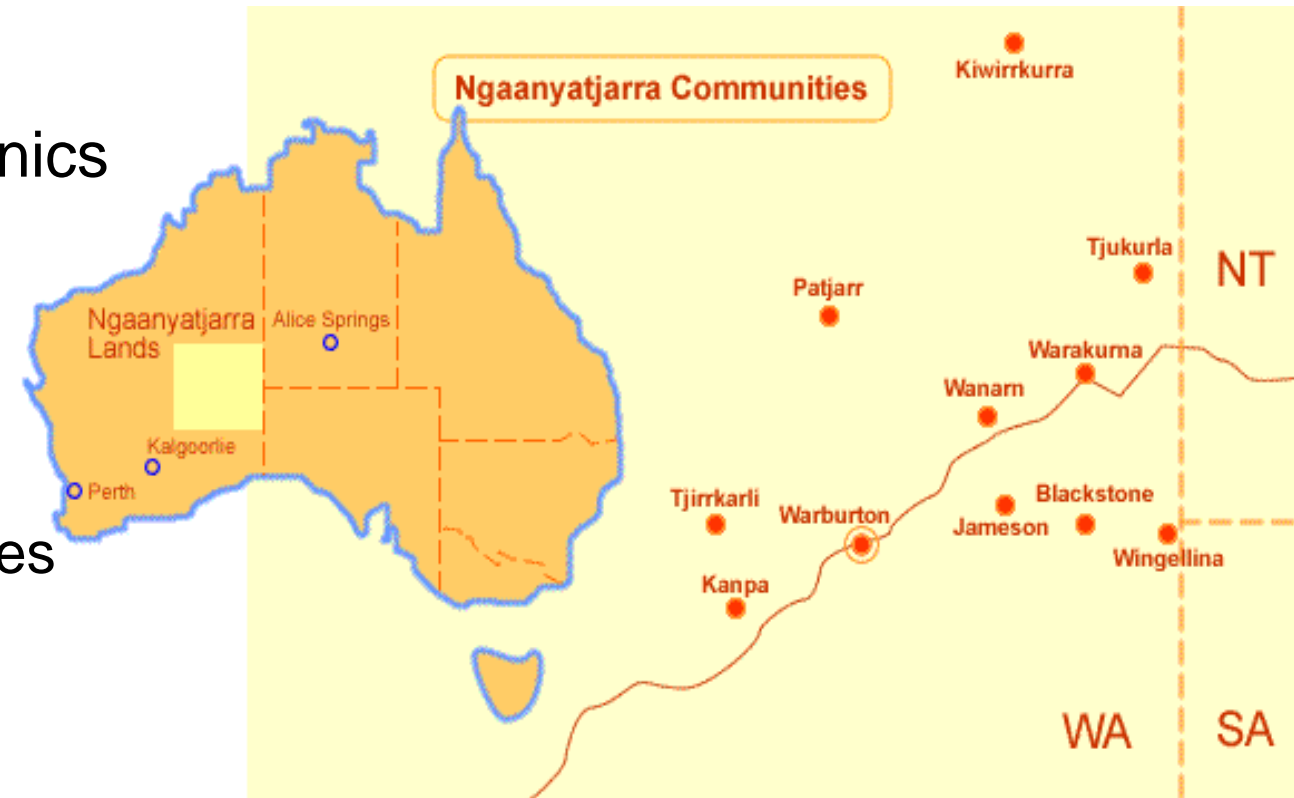


Ngaanyatjarra Health Service (NHS)

Aboriginal Community Controlled Health Service Ngaanyatjarra Council Group

11 very remote communities; 7 staffed clinics

- Primary health care & emergency care
- Nurses, Aboriginal Health Workers, GPs
- High rates - chronic disease & comorbidities
- ~1800 Aboriginal people
- ~350 non-Aboriginal people



Ngaanyatjarra communities

Strengths¹

- A strong connection to country
- People returned to country
- Committed core staff
- COVID-19 coordinator - directive changes
- External stakeholder relationships
- Advocacy - biosecurity zones established
- On lands collaborations
- Molecular POCT for STIs





Ngaanyatjarra lands

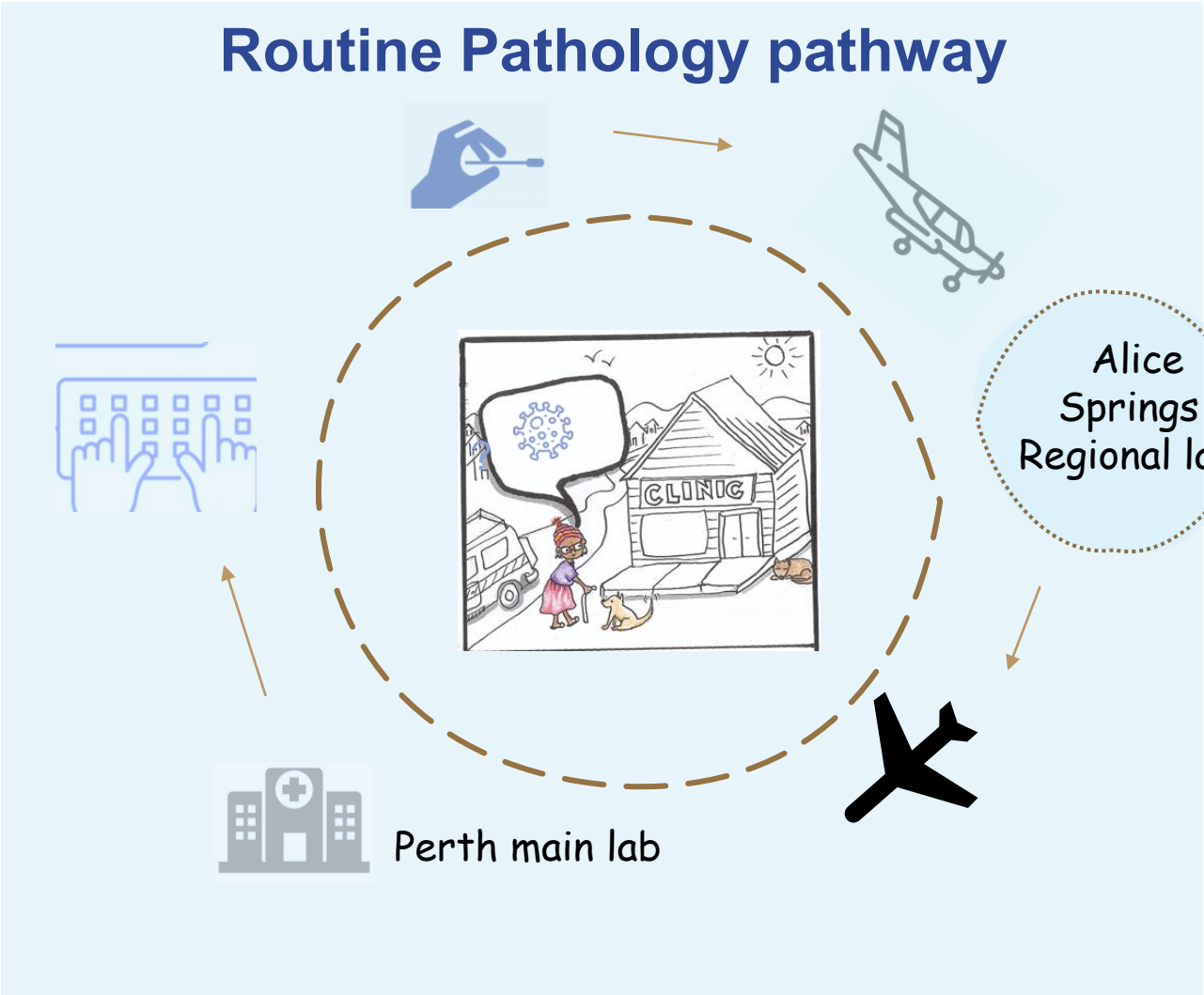
Challenges¹

- Very remote
- Transport; plane or 10-12hrs by road, unsealed roads
- Borders with NT and SA -many back roads
- Regional centre - Alice Springs
- Staff turnover- from interstate & NZ
- Infrastructure; social distancing & isolation
- Intergenerational large households
- Frequently changing directives
- Uncertainty, myths and fear

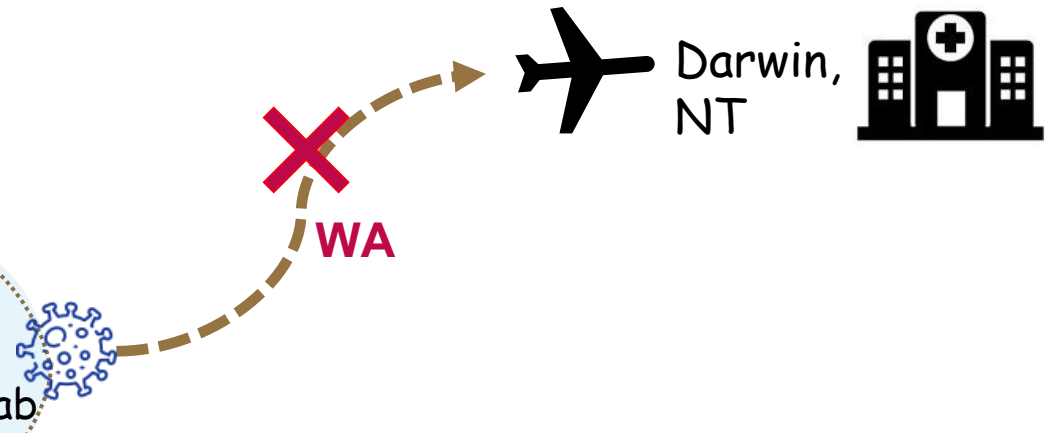


Pathology pathways - test result delays

Routine Pathology pathway



NT pathology pathway



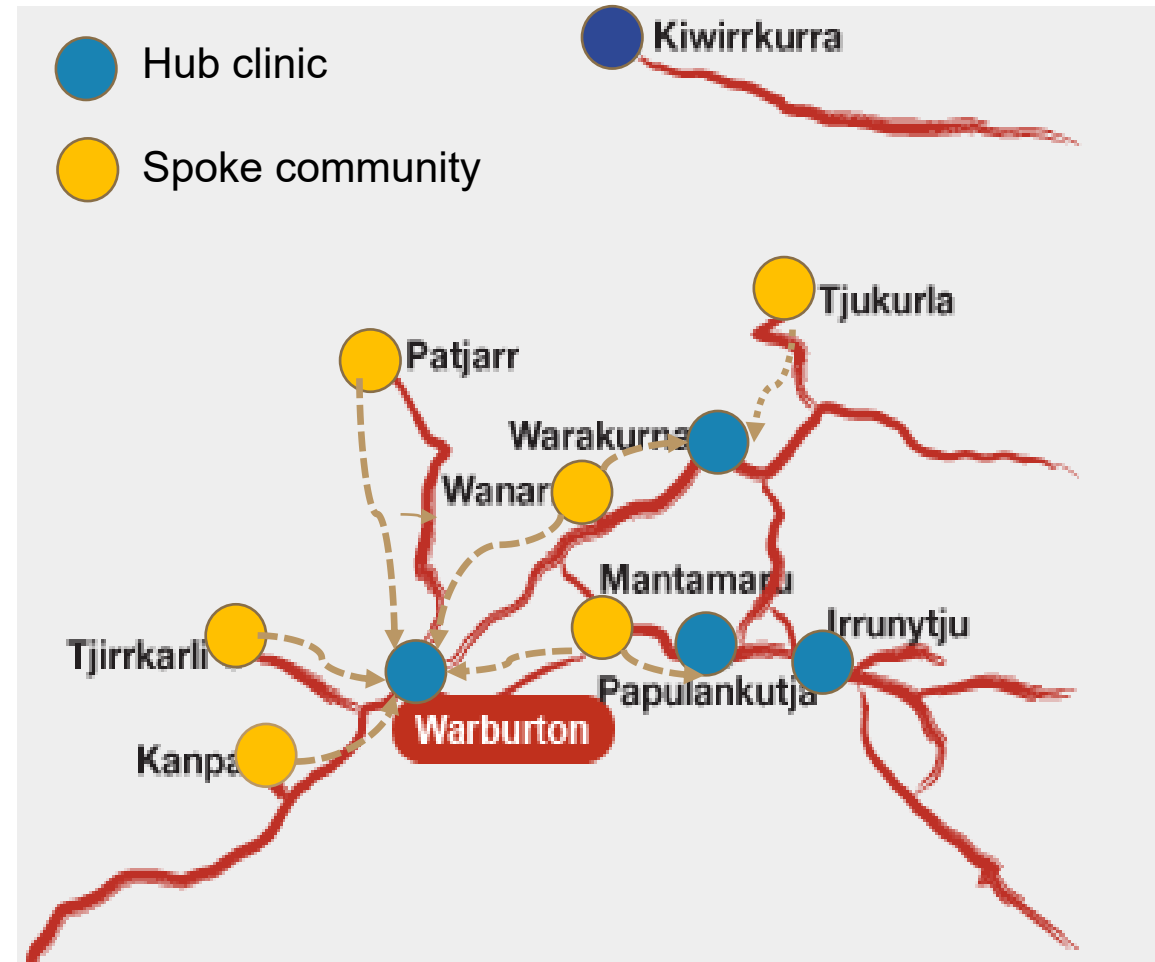
WA pathology pathway





Aboriginal and Torres Strait Islander COVID-19 POCT program

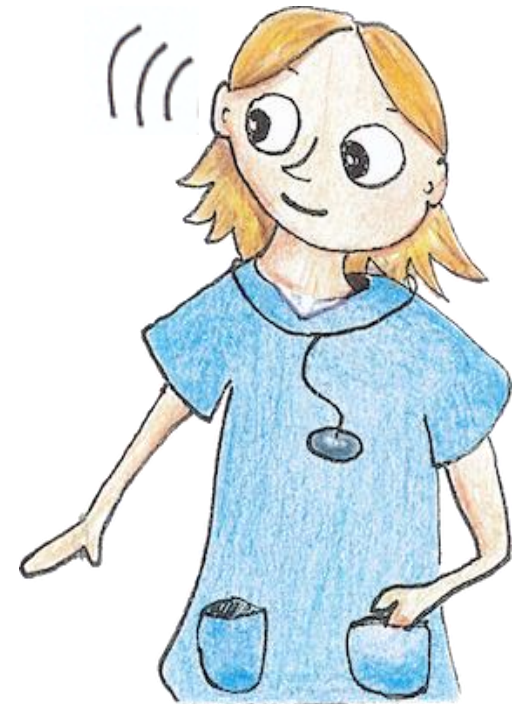
- Leveraged existing molecular STI POCT capacity
- Hub and spoke model
- 58 COVID-19 POCT operators trained
- High staff turnover



First training completed May 2020

Maintaining workforce

- COVID-19 POCT critical to comply with directives for workforce
- Rapid Antigen Tests (RATs) prohibited in WA (till 2022)
- Staff with symptoms and contacts
- Navigating
 - Borders & biosecurity zones
 - Staff quarantining
 - PCR testing directives
- NHS clinical guidelines (28 versions)



Community testing



“Isolating”
waiting for test result (45 minutes)



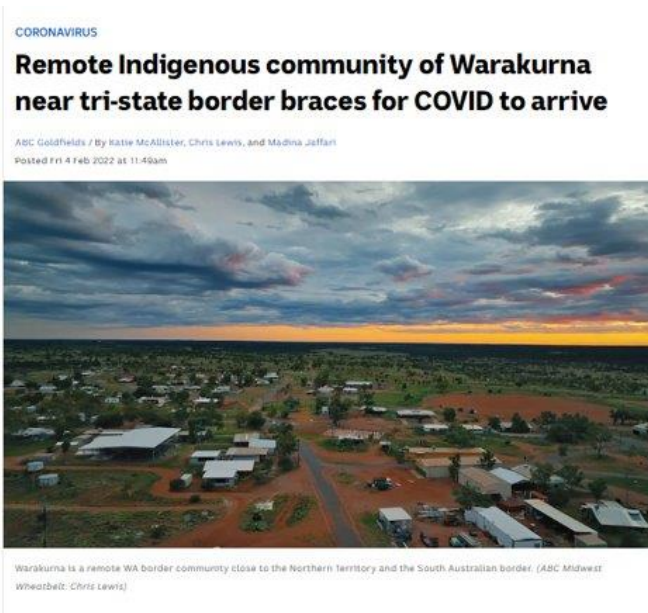
Results transmitted directly:

- Requesting Doctor/ medical records
- WA Dept of Health
- POCT Program database (deidentified results)

“We’re good to go”

COVID-19 POCT

- Gave us confidence that no COVID-19 in the community
- Identify the first cases rapidly and accurately
- Community clinic first to know
- Confidently trigger immediate public health response



“we can do a PCR test here and the results from that can be back in 45 minutes”

WA and Northern Territory police patrol the border. (ABC Midwest Wheatbelt: Chris Lewis)

'We're good to go'

Warakurna Clinic manager and nurse Jeanette Stansborough is confident the community is prepared for when, not if, the virus arrives.

“It’ll come across the border somehow, it’s only a matter of time before it gets here,” Ms Stansborough said.

“We have [a] COVID testing facility here, we have a T Tango machine, we can do a PCR test, and the results from that can be back in 45 minutes.”





First case in a WA remote Aboriginal community

"It's inevitable that someone will sneak across and bring COVID back into the community."

Mid-February 2022

- First case diagnosed using COVID-19 POCT
- Outbreak declared
- Community lockout
- Response team
- Community screen n=117
 - RATs; all negative
 - Lab PCR; 8 positive
- Double dose vaccination rate high
- No evacuations



WA and Northern Territory police patrol the border. (ABC Midwest Wheatbelt: Chris Lewis)

COVID-19 reaches remote Indigenous community in Western Australia

Broadcast Mon 21 Feb 2022 at 4:30pm



COVID-19 reaches remote Indigenous community in Western Australia (Supplied: Explor02)

Community 'not panicked': Shire president

President of the Shire of Ngaanyatjaraku, Damian McLean, said the focus was on slowing the spread, not eliminating the virus.

Community outbreak management



Ngaanyatjarra lands outbreak coincided with

- WA border opening (early March 2022)
- Omicron wave
- RATs no longer prohibited in WA
- Antivirals available for use

First cases in each community

- Identified by COVID-19 POCT
- Followed by home isolation
- Frequent RAT testing

Symptomatic / high-risk patients

- COVID-19 POCT



Western Australia
Western Australia border reopens after 697 days as the 'hermit state'

The reopening comes after one false start - and amid an Omicron outbreak and controversial new Covid restrictions

[See all our coronavirus coverage](#)

[Get our free news app; get our morning email briefing](#)

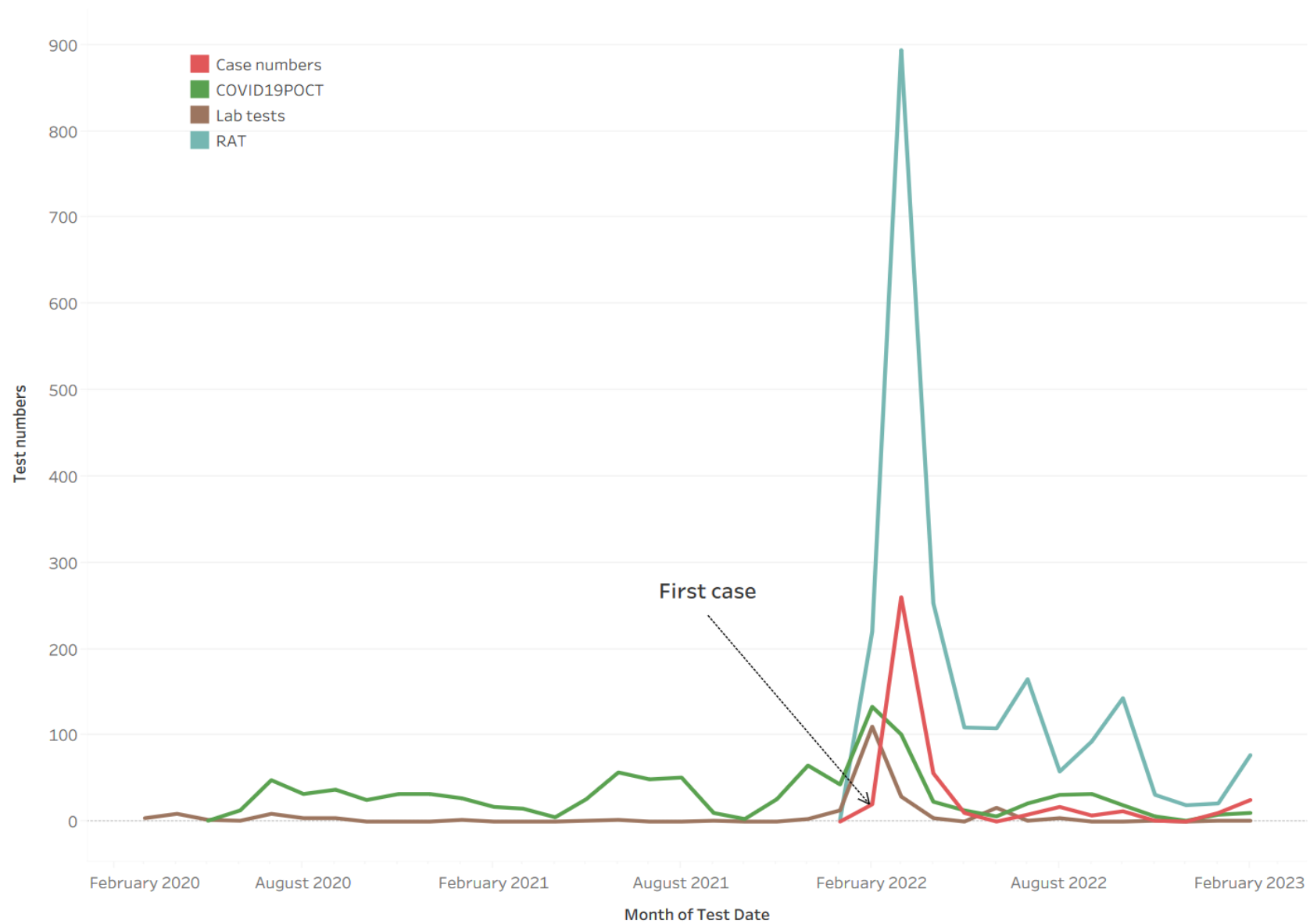
Narelle Towie

[@naretletowie](#)
Wed 2 Mar 2022 13:35 AEDT

After 697 days and one false start, the "hermit" state of [Western Australia](#) is on the precipice of rejoining the rest of the world - again



Number of tests by type and COVID-19 cases by month



Challenges

- Transport from spoke communities
- “Scary” results
- Result Interpretation
 - High cycle threshold (Ct)
- Ever changing directives
- Maintaining trained POCT operators

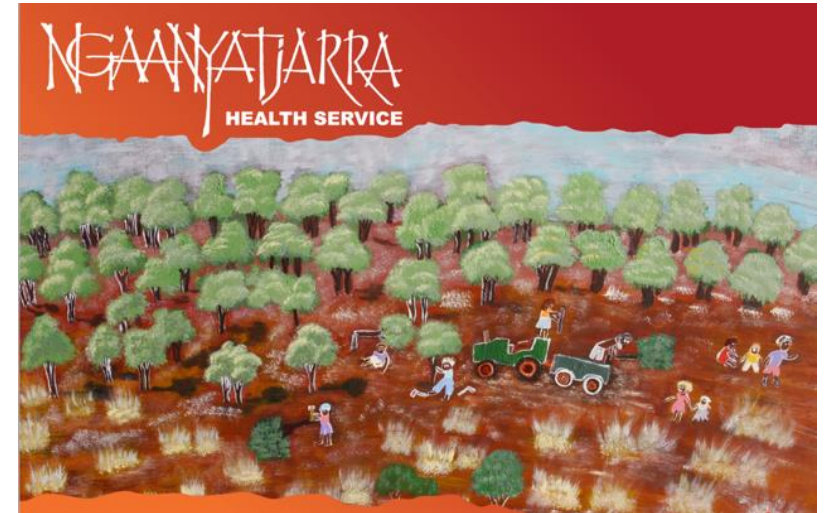
Test Result	Analyte Result	Detail	Errors
Assay Name	Xpert Xpress SARS-CoV-2	Vers	
Test Result	SARS-CoV-2 POSITIVE		



Conclusions

COVID-19 POCT enabled community control in uncertain times:

- Confirmation that communities COVID-19 free
- Enabled workforce maintenance
- Accurate early testing to identify first cases
- Slowed the spread & the number of cases
- Detection and management of patients at high risk



An invaluable tool in our community response





Acknowledgments

- First Nations COVID-19 Response Branch, Australia Government Department of Health and Aged Care
- COVID-19 POC Clinical Advisory Group
- The National Aboriginal and Torres Strait Islander Health Protection (NATSIHP) Sub-Committee
- Participating Aboriginal community controlled and government health services
- National, state and local Aboriginal Community Controlled Health Organisations and members who contributed to jurisdictional meetings:
 - National Aboriginal Community Controlled Health Organisation
 - Aboriginal Health Council of Western Australia
 - Ngaanyatjarra Health Service
 - Kimberley Aboriginal Medical Services
 - Aboriginal Health Council of South Australia
 - Nganampa Health Council
 - Victorian Aboriginal Community Controlled Health Organisation
 - Aboriginal Health and Medical Research Council of NSW
 - Aboriginal Medical Services Alliance Northern Territory
 - Central Australian Aboriginal Congress
 - Queensland Aboriginal and Islander Health Council
 - Apunipima Cape York Health Council

State health departments and other government services

- WA Health
- WA Country Health Service
- SA Health
- Department of Health & Human Services, Victoria.
- NSW Health
- QLD Health
- NT Health

Industry

- Cepheid Inc
- Medical Communication Associates, Adelaide
- HealthLink
- MNX Global Logistics
- TNT Express

Other centres

- University of Queensland Centre for Clinical Research
- University of Queensland Poche Centre for Indigenous Health
- Immunovirology and Pathogenesis Program, The Kirby Institute, UNSW Sydney
- St Vincent's Centre for Applied Medical Research
- Longhorn Vaccines and Diagnostics LLC

Pathology providers

- PathWest
- Pathology Queensland
- Forensic and Scientific Services
- SA Pathology
- Territory Pathology
- NSW Pathology
- Victorian Infectious Disease Reference Laboratory
- The Royal College of Pathologists of Australasia Quality Assurance Program
- NSW State Reference Laboratory for HIV & Molecular Diagnostics Medicine Laboratory, St Vincent's Hospital Sydney



Thank you



Image; Polly Pawuya Butler-Jackson 'Cutting the road'