Commonwealth Government COVID-19 Response Inquiry: Aboriginal and Torres Strait Islander COVID-19 Molecular Point-of-Care Testing Program

Date: 4 December 2023

Background:

Aboriginal and Torres Strait Islander people living in remote areas of Australia have limited access to the array of healthcare, hospital and pathology services, along with limited housing infrastructure. Furthermore, Aboriginal and Torres Strait Islander people experience high rates of chronic disease, resulting from a range of social determinants of health, including a history of colonisation and institutional racism. All these factors contribute to infectious diseases having a disproportionately greater impact in these settings than in urban settings.

In response to the COVID-19 pandemic, the Australian Government convened the National Aboriginal and Torres Strait Islander COVID-19 Advisory Group (hereafter referred to as the Advisory Group) to develop and deliver a National Management Plan to protect communities. Under the guidance of this group, the Aboriginal and Torres Strait Islander COVID-19 Molecular Point-of-Care (POC) Testing Program was initiated, with the aim to:

1. Provide rapid COVID-19 POC test results for Aboriginal and Torres Strait Islander peoples, particularly those unable to physically isolate or at increased risk of severe illness and to expedite hospitalisation and/or treatment.
2. Identify new COVID-19 outbreaks and inform rapid public health responses.
3. Complement the pathology-led national testing frameworks to extend reach, increase capacity and reduce time to COVID-19 results in high-risk settings where access to laboratory testing was not readily available.

The Aboriginal and Torres Strait Islander COVID-19 Molecular Point-of-Care Testing Program (hereafter referred to as the Program) utilised the GeneXpert assay for SARS-CoV-2 (Xpert® Xpress SARS-CoV-2) as it was the first qualitative molecular-based point of care (POC) test for SARS-CoV-2 approved by the Australian Therapeutic Goods Administration under emergency use only conditions. In addition, a network of 31 health services were already using GeneXpert devices for sexually transmitted infections (STI) POC testing.[1] The SARS-CoV-2 assay enabled sensitive molecular (polymerase chain reaction or PCR) testing to be conducted by remote primary care clinicians within their health service, providing results in an hour, compared to an average six days through the routine laboratory based system. Compared to rapid antigen tests (RATs), molecular testing is considered more accurate and more likely to detect early infection compared to RATs which may only become positive some days following initial infection. Further, RATs only became widely used in Australia in November 2021.

Here we describe two key aspects of the Commonwealth Governments COVID-19 response:

1. **The Aboriginal and Torres Strait Islander COVID-19 Point-of-Care testing Program.**
2. **Aboriginal and Torres Strait Islander led governance.**

1. The Aboriginal and Torres Strait Islander COVID-19 Point-of-Care Testing Program

Under the guidance of the Advisory Group, the Australian Government contracted the Kirby Institute, UNSW Sydney, in partnership with the Flinders University International Centre for Point of Care Testing, to implement the Program.[2] The Program commenced in early 2020 and quickly became **the world's largest decentralised SARS-CoV-2 molecular POC testing network**. To date, over 100 health services in regional and remote Aboriginal and Torres Strait Islander communities, either Aboriginal Community Controlled or government health services, participate in the Program and over 80,000 patient tests have been conducted. The median distance from participating health services to the nearest

laboratory performing COVID-19 testing was over 500 kms, with an average driving time of 8 hours. Further, many services were located in settings impacted by monsoonal conditions or were remote islands making them difficult to access. More detailed information about the Program implementation has been previously published.[2]

Funding for the Program was announced on the 16th April 2020, with the first patient test performed within a remote community on 20 May 2020. Early initiation of funding for the Program by the Commonwealth meant that impacts were realised early in the pandemic when many remote communities were yet to experience an outbreak of COVID-19. In this setting, molecular POC testing **averted unnecessary evacuations** of suspect cases out of community to larger regional settings to isolate while waiting on the result, thereby **saving health service costs, and decreasing anxiety for community members having to leave their families and country.**

Following the opening of state and territory borders in the second half of 2021, the **first cases of COVID-19 in nearly all of the communities participating in the Program, were detected by molecular POC testing, prompting swift public health action with rapid response teams visiting within 0-1 day after the case was detected, compared to a six-day delay for routine laboratory-based testing**. Delays in receiving results heightens the risk of ongoing transmission of infection, and delays initiation of therapeutic treatment if indicated.

An external evaluation, commissioned by the Department of Health and Aged Care found that molecular POC testing supported by **the Program averted between 23,000-122,000 COVID-19 infections within 40 days of an outbreak, and saved between $337 million and $1.8 billion in health care costs within the first 40 days after an outbreak,** further detail can be found here Evaluation of COVID-19 point-of-care testing in remote and First Nations communities | Australian Government Department of Health and Aged Care.

The Program has established infrastructure that can be utilised for testing for other priority infections whist maintaining capacity for future pandemic responses. In mid-2022 the Program transitioned from testing for SARS-CoV-2 only to testing for four common respiratory viruses, SARS-CoV-2, influenza A and B and respiratory syncytial virus (RSV) in the one test.

2. Impact of Aboriginal and Torres Strait Islander led governance.

On 5 March 2020, the Aboriginal and Torres Strait Islander COVID-19 Advisory Group (the Advisory Group) was established, co-chaired by the National Aboriginal Community Controlled Health Organisation (NACCHO) and the Indigenous Health Branch, Australian Government. The Advisory Group supported early engagement, shared decision making and genuine partnerships between the National Aboriginal Community Controlled Health Organisation (NACCHO), state and territory ACCHOs and local, state and federal government. The Advisory Group members included NACCHO, Aboriginal and Torres Strait Islander communicable and infectious disease experts, state and territory government representatives, Public Health Medical Officers, ACCHO representatives, and Australian Government departments. This membership provided a foundation for an Aboriginal and Torres Strait Islander led COVID-19 response, aligning with key principles of the National Agreement on Closing the Gap.

The Program reported regularly to the Advisory group and sought advice on site inclusion criteria, site selection, training, and other issues affecting the operations of the Program. **Aboriginal and Torres Strait Islander led governance, through the mechanism of the Advisory Group, enabled a coordinated, rapid public health response following a COVID-19 POC positive result.** This included governments and peak Aboriginal land councils and organisations working together to safely isolate COVID-19 positive people in the community, coordination of the Royal Flying Doctor Service to

evacuate people from community where required, enactment of the Biosecurity Act 2015 at the communities' request, and deployment of additional workforce support.

In the first 18 months of the COVID-19 pandemic (January 2020 to June 2021) COVID-19 cases among Aboriginal and Torres Strait Islander peoples represented less than 1% of all cases in Australia[3]. **The successful COVID-19 response and low rate of cases among Aboriginal and Torres Strait Islander peoples can be attributed to Aboriginal and Torres Strait Islander led governance and the ongoing partnership between the Australian Government and the Aboriginal Community Controlled health sector.**

Lessons learnt through the COVID-19 response have extended beyond the COVID-19 pandemic. In late 2022, the advisory group was transitioned to the National Aboriginal and Torres Strait Islander Health Protection (NATSIHP) AHPPC Sub-Committee, providing an ongoing mechanism for Aboriginal and Torres Strait Islander people to have a voice about the health issues that impact them. NATSIHP continues to provide advice and governance to the First Nations Molecular POC Testing Program (formerly the COVID-19 POC Testing Program), as well as the STI POC Program (TTANGO) and other emerging POC programs for priority infections such as Group A Strep and HPV.

References:

1. Guy RJ, Ward J, Causer LM, et al. Molecular point-of-care testing for chlamydia and gonorrhoea in Indigenous Australians attending remote primary health services (TTANGO): a cluster-randomised, controlled, crossover trial. *Lancet Infect Dis* 2018; **18**(10): 1117-26.
2. Hengel B, Causer L, Matthews S, et al. A decentralised point-of-care testing model to address inequities in the COVID-19 response. *Lancet Infect Dis* 2021; **21**(7): e183-e90.
3. Australian Department of Health. COVID-19 Australia: Epidemiology Report 47.: Communicable Disease Intelligence 2021; 2021.