IMPACT OF THE INTRODUCTION OF MOLECULAR POINT-OF-CARE TESTING FOR SEXUALLY TRANSMITTED INFECTIONS ON TESTING UPTAKE AND INFECTIONS DETECTED IN REMOTE AND REGIONAL ABORIGINAL AND TORRES STRAIT ISLANDER COMMUNITIES IN AUSTRALIA.

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Background:
Remote and regional Aboriginal and Torres Strait Islander communities experience high rates of chlamydia(CT), gonorrhoea(NG) and trichomonas(TV). In these settings, long distances to centralised laboratories, hinder access to timely diagnosis. We evaluated the impact of introducing STI molecular point-of-care testing (POCT) performed by primary care staff on overall tests done and infections detected.

Methods:
We conducted interrupted time series analysis to assess changes and compare mean monthly tests and infections detected before (9months) and after (15months) the introduction of CT/NG POCT and TV POCT in the TTANGO2 program (2016-2019). We included routine collected testing data from 20 clinics (18 remote, 2 regional) of CT/NG and TV tests (either laboratory or POC), where all clinics contributed data, among Aboriginal and Torres Strait Islander people aged 15-54yrs.

Results:
There were 14667 CT/NG tests (69% women, 73% 15-34yrs) and 14160 TV tests (65% women, 68% 15-34yrs) conducted. There was an immediate and large increase of CT/NG tests (p=0.008) when CT/NG POCT was introduced, and a 17% increase in the mean monthly tests in the after period compared with the before period (648 vs 553 p<0.001). Similarly, there was an immediate and large increase of TV tests (<0.001) when TV POCT was introduced and a 46% increase compared with before (668 vs 456, p<0.001). The mean monthly number of positive tests also increased in the after period (CT 48%, NG 45%, TV 43%) compared with the before period.

Conclusion:
This analysis uniquely demonstrates that the introduction of molecular POCT increased testing and early detection of STIs in remote and regional primary care clinics. The additional STIs diagnosed would have reduced the risk of onward

transmission and pelvic inflammatory disease, which are at high rates in these settings. To optimise these benefits, health services must be supported to enable greater uptake of molecular POCT.

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Aboriginal and Torres Strait Islander approvals:
The study was approved by the Western Australian Aboriginal Health Ethics Committee, Far North Queensland Human Research Ethics Committee, Aboriginal Health Research Ethics Committee of South Australia, Central Australian Human Research Ethics Committee, Human Research Ethics Committee of NT Health and Menzies School of Health Research, Townsville Hospital and Health Service Human Research Ethics Committee, and the Kimberley Aboriginal Health Forum Research Sub-committee. The TTANGO2 program was governed by an Executive Group which included representatives of state and territory peak Aboriginal Community Controlled Health Organisations and partnering Aboriginal Community Controlled Health Services.