

Assessment of the training and quality systems for the TTANGO3 (Test, Treat And GO) sexually transmitted infection (STI) point-of-care testing network

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Background: In TTANGO3, molecular-based point-of-care testing (POCT) for chlamydia (CT), gonorrhoea (NG) and trichomoniasis (TV) is conducted on the Cepheid GeneXpert® in regional/remote Australian Indigenous communities across five states/territories. The program evolved from a randomised controlled trial (TTANGO) and a translational research project (TTANGO2) into routine operation in 51 regional/remote health services, 86% of which also participate in the COVID-19 POCT Program. Here we describe the rigorous training and quality management framework which underpins TTANGO3.

Methods: The program's training resource package includes a training manual, quick-reference step-by-step posters, and videos. Flexible training options comprise on-site visits, centralised training sessions, and online presentations utilising GoToMeeting and Webex. Written and practical competency assessments are completed to attain competency, with a one-year expiry. All services participate in quality control (QC) testing (monthly, positive sample) and external quality assurance (EQA) testing (2-3 events per year, 5 samples of varying positivity per event) to monitor analytical quality.

Results: 797 operators have achieved competency, with 228 renewals also issued. 72% of operators were nurses and 18% Aboriginal/Torres Strait Islander Health Workers/Practitioners. 358 training sessions have been undertaken, with 80% for new operators, and 20% for competency renewal. Pre-2020, 37% of 281 training sessions were conducted face-to-face. Since 2020, >90% of 77 training sessions were web-based. Since 2016, 1488 CT/NG QC (positive) tests were performed with mean annual concordance of 100%. For TV, which commenced in 2018, 1108 QC (positive) tests had a mean annual concordance ranging from 99.6% - 100%. For CT/NG EQA testing, mean concordance across 15 surveys (n=1512 tests) was 97.9% (range 86-100%). For TV EQA testing, mean concordance across 9 testing surveys (n=761 tests) was 99.2% (range 97-100%).

Conclusion: The TTANGO3 training and quality system has built a strong workforce that can conduct STI POCT in remote areas to a high analytical standard.

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