

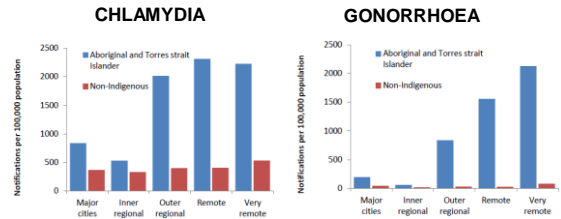


TTANGO (test, treat and go); use of molecular point-of-care tests to detect and treat sexually transmissible infections in young Aboriginal people in remote communities

A/Professor Rebecca Guy and Corrine Swan on behalf of TTANGO investigators

World IUST/ISSTD conference
15 September 2015

Why do we need a PCR POC test for chlamydia and gonorrhoea in Australia?



Kirby ASR 2014

Difficulties managing STIs in remote communities

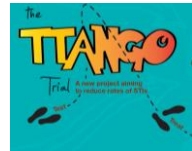
- Relies on Aboriginal health workers and nurses
- Most people asymptomatic
- Far away laboratory
- ~20% untreated (Guy, Sex Health, 2012)
- Average time to treatment 21 days (Guy, Sex Health, 2012)



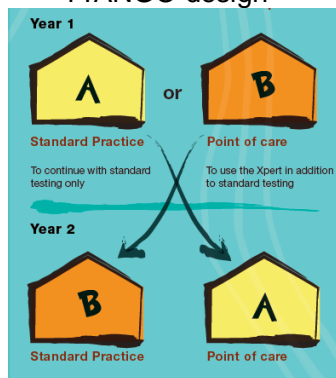
Remote Australian communities may be 100's of kms from laboratory services

Randomised trial of molecular STI point-of-care

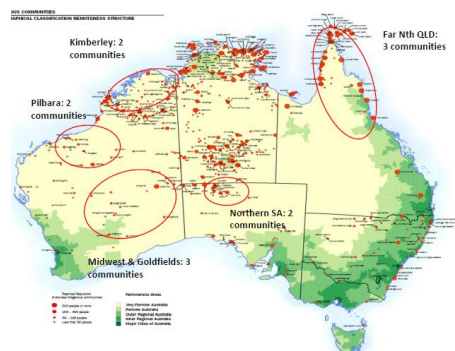
- TTANGO: Test, treat and go...
- NHMRC project grant
- Impact:
 - Uptake and timeliness of treatment
 - Re-infections
 - Acceptability
 - Cost-effectiveness



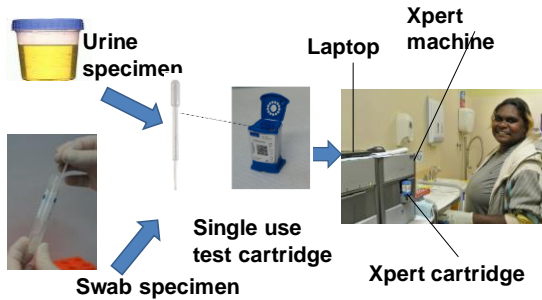
TTANGO design



TTANGO sites



Xpert POC Test for CT and NG



Training and resources

- Formal training package
- Competency
- POC training
 - Flexible approaches
 - Repeat sessions
- Wall charts, other resources



Other support systems

- Quality management framework
- Remote login learning and system support
- Processes for manually recording and transmitting of POC results



Quality control testing



External quality assurance test

STI testing

- Guidelines 16-29 years
- Testing in people with symptoms or risk
- Opportunistic testing
 - ATSI health check
- Outreach

Providing treatment based on POC

- Ask patient to wait locally
- Recall patient next day
- Test sample at beginning of the consultation when doing health checks so POC result available at the end
- Contact tracing, re-testing

Preliminary POC testing and treatment outcomes

- 2486 CT/NG Xpert tests (July 2015)
- Data from 4 of 12 health services
- POC period: 120 positive CT/NG POC tests
- Before period: 93 positive CT/NG POC tests
- Median age of positive test: 24 year

Treatment based on the lab test result

Overall (4 sites)	POC phase (n=120)	Standard phase (n=93)
% Treatment uptake (95% CI)	96.7 (91.9 - 99.1)	90.3 (84.4 - 94.4)
Treatment intervals (days)	<=1	0 (0%)
	2-7	36 (39%)
	8-14	36 (39%)
	≥15	31 (33%)
†Median time to treatment (days) [IQR]	0 [0-3.5]	11 [7-26]
†Mean time to treatment (days)	5.4	30.1

* Symptomatic treatment = treatment given to client based on presence of symptoms or assessed as high-risk (e.g. contact of a positive case). † Standard care phase: those treated on same day excluded as treatment given based on symptoms or high risk assessment. ‡ Data available for 3 sites.

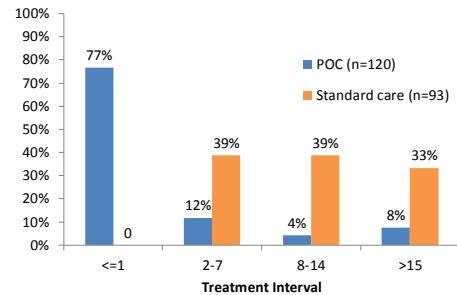
Conclusion

- Benefit for health service and community
- POC enabled patients to be treated quickly
- Ownership
- Important to have Aboriginal health workers and nurses involved in POC process

Acknowledgements

- Participating health services & staff
- TTANGO operation team
 - Louise Causer
 - Lisa Natoli
 - Belinda Hengel
 - Annie Tangey
 - Steve Badman
 - James Ward
 - John Kaldor

Preliminary treatment outcomes



Next steps

- Final RCT analysis
 - Re-infection
 - Cost-effectiveness
- TTANGO2:
 - NHMRC partnership
 - WA Health, community organisations, laboratory
 - Sustainability
 - Does a multi-faceted sexual health program including POC reduce prevalence and reproductive morbidity?

Acknowledgements

- TTANGO Investigators: Rebecca Guy, John Kaldor, Basil Donovan, David Wilson, Handan Wand, David Regan, Steven Badman, Louise Causer, James Ward, Belinda Hengel, Lisa Natoli, David Anderson, David Whitley, Sepehr Tabrizi, Mark Shephard and Christopher Fairley
- Participating health services & staff
 - Departments of Health WA, QLD, SA
 - West Australian Country Health Service
 - PathWest Laboratory Medicine
 - Western Diagnostics Pathology
 - Clinipath Pathology
 - Queensland Health Pathology
 - Sullivan Nicolaidis Pathology
 - SA Pathology
 - Aboriginal Health Council of Western Australia
 - Queensland Aboriginal and Islander Health Council
 - Aboriginal Health Council of South Australia
 - TTANGO Reference Group
 - Kirby Institute, UNSW
 - Baker IDI
 - Apunipima Cape York Health Council
 - Ngaanyatjarra Health Service
 - Burnet Institute
 - Royal Women's Hospital, Melbourne
 - QLD Paediatric Infectious Disease Laboratory
 - Flinders University
 - University of Melbourne
 - National Reference Laboratory
 - Medical Communication Associates
 - Cepheid
- TTANGO is funded through the National Health and Medical Research Council