**THE COST-EFFECTIVENESS OF MOLECULAR POINT OF CARE TESTING FOR CHLAMYDIA AND GONORRHOEA IN REMOTE COMMUNITIES**

Watts CG[1], Hui B[1], Wiseman V[1], Smith K[1], Natoli L[1,2], Andrewatha K[3], Walley B[4], Carroll C[5], Hengel B[6], O'Connor S[7], Marshall-Lang[8], Whiley D[9], Tabrizi SN[10,11], Gunathilake M[12],Donovan B[1], Fairley CK[13,14], Badman SB[1], Tangey A[15], Wand H[1], Shephard M[3], Regan DG[1], Wilson D[1],Maher L[1], Anderson D[2], Mak D[7] Persing.D[16], Atkinson D[17], Armstrong.P[7], Speers.D[18], Kong M[1], Bulfone.L[19], Kerry.K[7], Motta.L[3],Ward J[1,20], Kaldor JM[1], Guy RJ[1], Causer L[1]

1. The Kirby Institute, University of New South Wales, Sydney, Australia
2. The Burnet Institute, Melbourne
3. Flinders University International Centre for Point of-Care Testing, Flinders University, Adelaide, South Australia
4. Aboriginal Health Council of Western Australia (AHCWA)
5. Apunipima Cape York Health Council, Cairns, Queensland, Australia
6. Aboriginal Health Council, South Australia
7. Point of Care Testing,Program,Queensland Health
8. Communicable Disease Control Directorate, WA Health
9. UQ Centre for Clinical Research, The University of Queensland, Brisbane
10. Department of Microbiology and Infectious Diseases, The Royal Women's Hospital, Parkville, Victoria
11. Department of Obstetrics and Gynaecology, The Royal Women's Hospital and Murdoch Childrens Research Institute, University of Melbourne, Parkville, Victoria,
12. Sexual Health and Blood Borne Virus Unit SHBBV), Centre for Disease Control, Department of Health, Darwin
13. Melbourne School of Population and Global Health, University of Melbourne, Melbourne, Victoria, Australia
14. Melbourne Sexual Health Centre, Melbourne, Victoria, Australia
15. Ngaanyatjarra Health Service, Alice Springs, Northern Territory, Australia
16. Cepheid
17. Faculty of Health and Medical Science,The University of Western Australia
18. PathWest
19. Deakin Health Economics unit (DHE), Deakin University.
20. Baker IDI, Alice Springs, Northern Territory, Alice Springs, Northern Territory

**Background:** A cluster-randomised controlled trial (called TTANGO) conducted in remote health services in Northern Australia between June 2013 and February 2016 found that the time-to-treatment was substantially reduced following implementation of point-of-care (POC) testing for chlamydia and gonorrhoea. The aim of our study was to calculate cost per woman tested/managed and establish if this model of care is cost-effective compared to standard care.

**Methods**: A decision-analytic Markov model was constructed to simulate the patient clinical pathway using POC tests in a remote health service, compared with standard care over a 10-year time horizon from the health system perspective. Outcome and cost data were obtained from the TTANGO trial and included costs of management of infection and sequelae, follow-up, internal and external quality control and training of staff. Quality adjusted life year (QALY) weights related to chlamydia and gonorrhoea infection and sequalae, and data relating to the risk of sequalae and costs of management were sourced from published literature.

**Results:** Preliminary results indicate the mean total cost per woman tested/managed over 10 years, was AUD 1,336 based on POC testing, compared with AUD 1,457 for standard care. The main drivers of reduced cost for POC testing in the model were less staff time required for follow-up and decreased incidence of pelvic inflammatory disease. The model also indicates that POC testing improves quality of life due to decreased incidence of pelvic inflammatory disease.

**Conclusions:** Findings from our modelling suggest that chlamydia and gonorrhoea testing and management among women in remote communities based on POC testing is cost effective. Further analyses will be conducted to integrate the public health benefits of POC testing e.g., prevention of onward transmission in the population due to more timely treatment.

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