

## **PRESUMPTIVE TREATMENT FOR CHLAMYDIA AND GONORRHOEA IN REMOTE ABORIGINAL HEALTH SERVICES**

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**Introduction:** In the remote Australian primary health care setting, presumptive treatment is recommended for people presenting with STI symptoms, certain risk factors or as sexual contact/s of a chlamydia (CT) or gonorrhoea (NG) case. This approach could result in unnecessary treatment among those without infection, and contribute to antibiotic resistance. In the context of the TTANGO2 point-of-care (POC) testing program we evaluated the extent of unnecessary treatment among those presumptively treated for CT/NG.

**Methods:** From 2016 to 2018, at 11 services where data were available, we identified those aged  $\geq 16$  years for whom there was evidence of presumptive treatment (azithromycin and amoxicillin, or azithromycin and ceftriaxone) on the same day as the specimen collection for a CT/NG test, and determined the proportion who tested negative for both CT/NG. We used a chi-squared test to assess difference by age-group and sex.

**Results:** Among 500 people treated presumptively for CT/NG, 278 (55.6%) tested negative for both infections, 125 (25.0%) tested positive for NG only, 47 (9.4%) for CT only, 50 (10.0%) for both CT and NG. A negative test for CT and NG was more common in females than males (63.9% vs 49.7%,  $p < 0.01$ ) and in those aged  $\geq 35$  years (<25 years: 48.4%, 25–34 years: 58.6%, and  $\geq 35$  years: 70.2%,  $p < 0.01$ ).

**Conclusion:** Our evaluation demonstrates that in this setting where syndromic management is recommended and routinely used, presumptive treatment of patients who subsequently test negative for CT/NG occurs frequently, particularly among women and those aged  $\geq 35$  years. These findings suggest that POC testing for CT/NG has the potential to reduce unnecessary treatment. However, there would need to be careful consideration of loss to follow-up rates and other pathogens that may be associated with symptoms.

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