## A RETROSPECTIVE STUDY OF DIAGNOSTIC DATA FOR SEXUALLY TRANSMISSIBLE INFECTIONS IN SOUTH AUSTRALIAN ABORIGINAL COMMUNITY CONTROLLED HEALTH SERVICES (2008-2016)

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**Background:** Australian Aboriginal communities experience a high burden of sexually transmissible infections (STIs). The Aboriginal Health Council of South Australia (AHCSA) Sexual Health Program (established 2009) aims to increase STI testing in Aboriginal Community Controlled Health Services (ACCHS) through clinical capacity building and community engagement. This retrospective study examined trends in diagnostic testing and positivity rates for chlamydia, gonorrhoea and trichomonas in SA ACCHS during the lifetime of the program using routinely collected STI diagnostic data (2008-2016).

**Methods:** De-identified diagnostic data for chlamydia, gonorrhoea and trichomonas from nine participating ACCHS (2008-2016) were extracted by the SA public laboratory. Core data included health service, sex, postcode, date of birth, specimen type, collection date, test date and result. Descriptive analysis of STI diagnostic testing indicators and STI test positivity rates was performed, and trends examined using logistic regression analysis.

**Results:** From 2008-2016, there was a 2-fold increase in the number of people tested for STIs. More females (61.1%, 95%CI 59.8% to 62.4%) were tested than males (38.8%, 95%CI 37.5% to 40.1%). Just over half (54.6% (95%CI 53.3 to 55.9%)) of people tested were in the 16-30 year old target age range. Mean coverage each year of 16-30 year old regional/remote current clients between 2013-2016 was 28% (SD 3.3%). Between 2013-2016 when testing was relatively stable, there were significant declines in positivity for chlamydia (OR=0.39, 95%CI 0.26 to 0.58, P <0.001) and trichomonas (OR =0.40, 95%CI 0.23 to 0.68, P = 0.001), but no significant decrease in gonorrhoea positivity.

**Conclusions:** Since the AHCSA Sexual Health Program was established, there has been a substantial increase in testing for common bacterial STIs in ACCHS in SA. In parallel, there has been a decline in chlamydia and trichomonas positivity. Further research is required to determine whether this can be attributed to the program.

Disclosure of Interest Statement: No conflicts of interest to disclose.