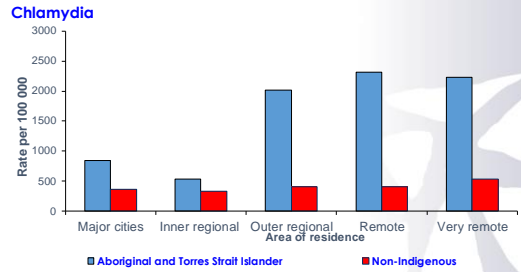


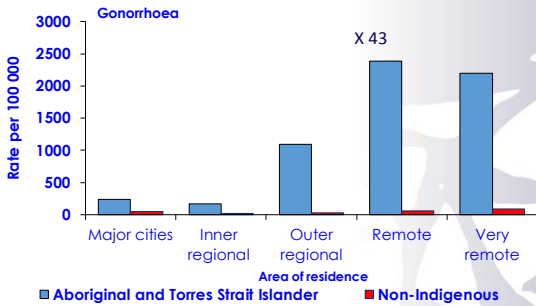


Supporting primary health care services to address endemic rates of STIs: findings from the STRIVE trial
A/Prof James Ward

Chlamydia by remoteness



Gonorrhoea by remoteness



STRIVE

RCT of CQI in remote primary care (68 remote communities)

5 year project

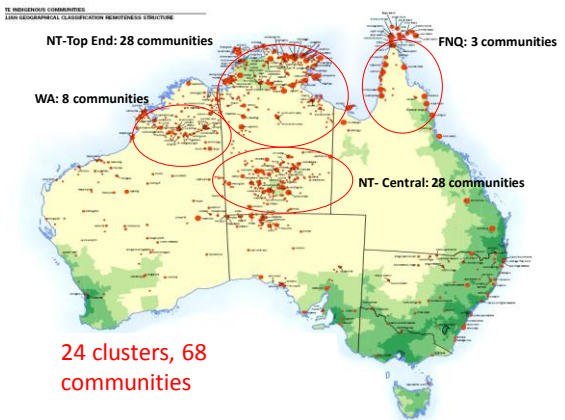
NHMRC Funded

Step wedge cluster design

STUdy PROTOCOL [Open Access](#)

STI in remote communities: improved and enhanced primary health care (STRIVE) study protocol: a cluster randomised controlled trial comparing 'usual practice' STI care to enhanced care in remote primary health care services in Australia

Abstract
Background: Despite low detection of infections, rates of sexually transmissible infections (STI) in remote Aboriginal, Torres Strait and non-Indigenous (non-Aboriginal) populations are high. Remote communities have been identified as priority areas for STI control and surveillance. Remote primary care services are often understaffed and have limited resources. The STRIVE study is a stepped wedge cluster randomised trial designed to compare a group health quality improvement program (GHQIP) to usual STI clinical care delivered in remote primary health care services. The GHQIP is an enhanced intervention comprising several components of sexual health service delivery, implementation of a sexual health action plan, six-monthly clinical service activity data reports, regular medical reviewing and a regional specialist, training and financial incentives. The trial compares 'usual practice' STI care to enhanced care in remote primary health care services. The primary outcomes are prevalence of chlamydia, gonorrhoea and trichomonas in Aboriginal and Torres Strait populations. The trial will be conducted over five years, comprising one and a half years of trial preparation and community consultation, three years of trial conduct, and a half year of data analysis. The trial was initiated in 48 remote Aboriginal health services in the Northern Territory, Queensland and Western Australia.



STRIVE Primary Outcomes

STRIVE – Cluster randomised trial to determine if a CQI program can have an impact on prevalence of STIs - 68 remote communities

↓ **Prevalence of chlamydia, gonorrhoea and trichomonas in 16-34 year olds**

- Testing coverage
- Time to treatment
- 3 month testing for re-infection
- Contact tracing

STRIVE Sexual Health Quality Improvement program and cycle

1. Development & measurement of relevant indicators
2. Modifications to PMS
3. Extraction of laboratory data
4. Data analysis & feedback
5. SAT & qualitative interviews with clinical teams
6. Action Plan



STRIVE field coordinators

- Employed to keep sexual health on the agenda
- Conduct systems assessments with clinics
- Assist with development of action plans
- Provide regular data reports on progress

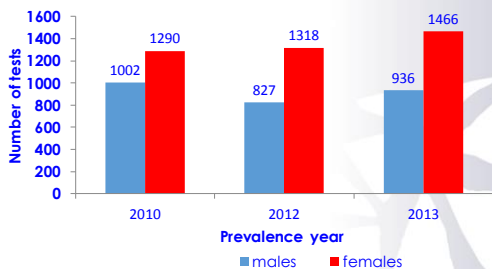
STRIVE field activity

- 264 site visits completed
- Another 66 site visits in the coming 3-4 months
- 238 follow up calls (3 month and 9 month)
- Many ad hoc calls and emails
- 900 clinical staff encounters
- 55 qualitative interviews

Methods: prevalence study

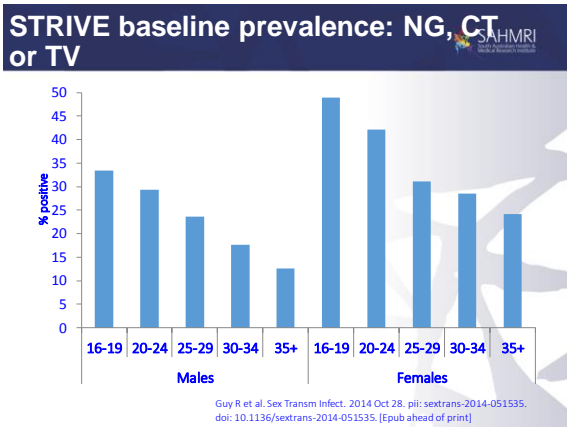
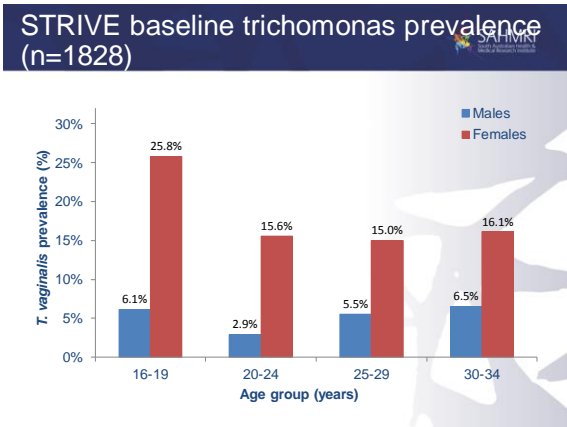
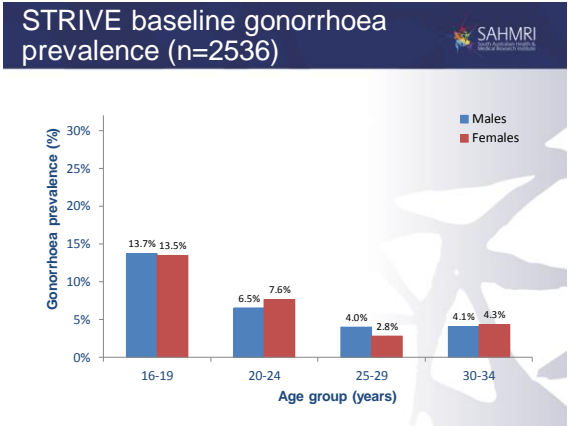
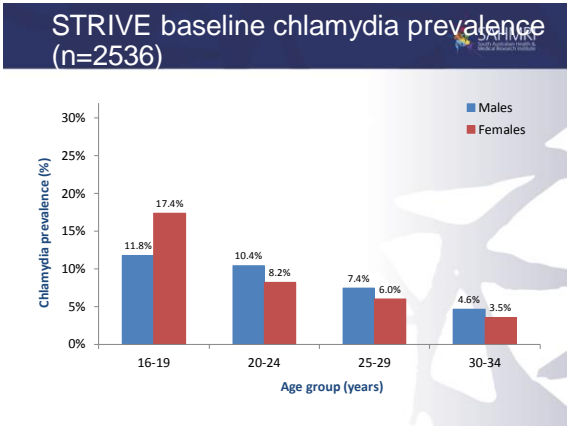
- Defined period each year 2010, 2012, 2013
- Aimed to offer testing to all clients attending in the age group 16-34
- Quotas for each service according to cluster size
- Broken down by sex and age group
- Relied on PHC staff to conduct prevalence study

Number of prevalence study tests per year

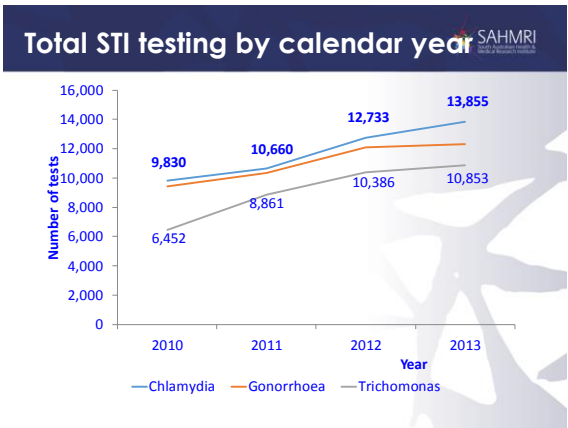


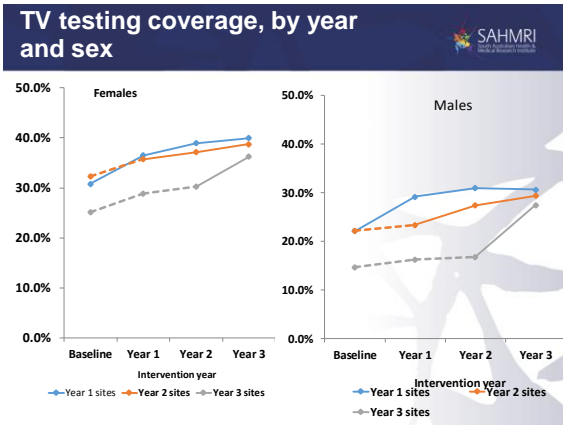
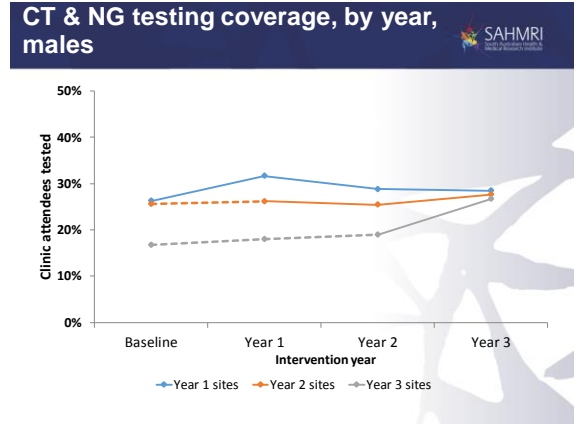
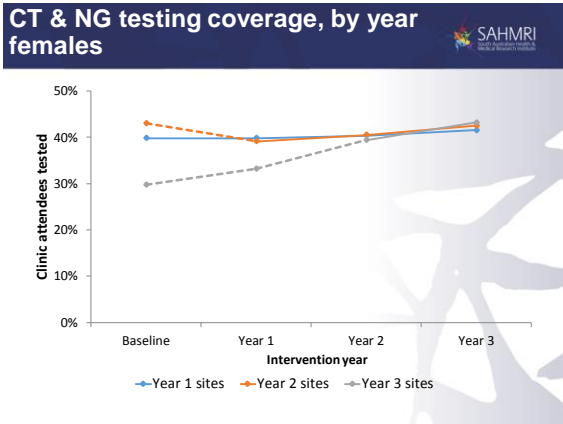
Average age of clients aged 16-34 yrs of age

	All attendees	Females	Males
YR 1 sites	25.0yrs	24.9yrs	25.1yrs
YR 2 sites	24.5yrs	24.4yrs	24.7yrs
YR 3 sites	24.8yrs	24.7yrs	25.0yrs



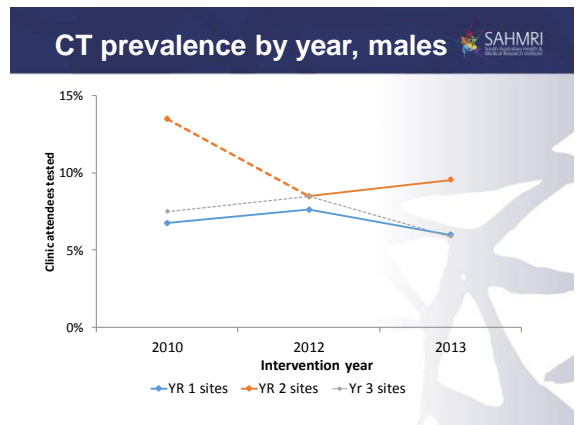
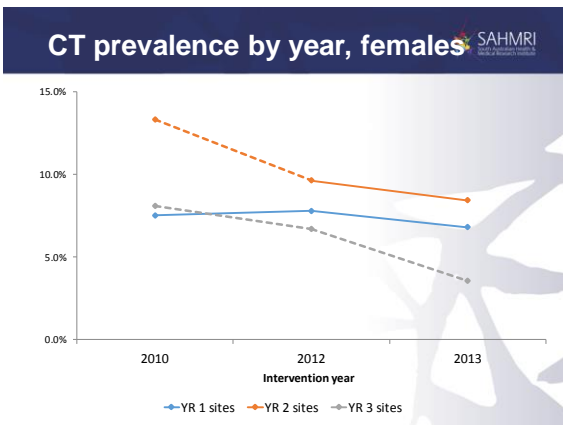
- ### Analysis
- Total testing increase
 - Two time points for comparison:
 - Year 1-- a comparison of first 8 clusters undertaking SH CQI program with the remaining 16 clusters as controls
 - Year 2--is a comparison of 16 clusters undertaking SH CQI program with remaining 8 controls
 - Testing coverage
 - Prevalence
 - Age 16- 25 vs 25-35



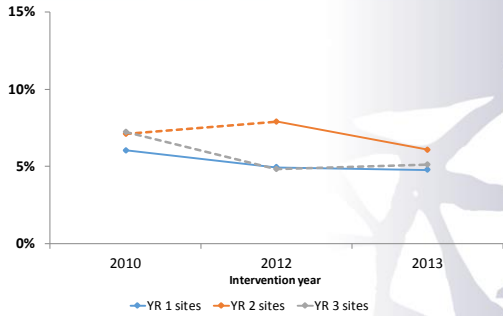


Relative proportion tested by intervention year

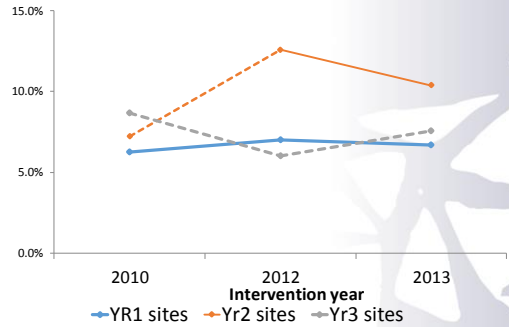
TESTING COVERAGE	Yr1	95%CI	Yr2	95%CI
OVERALL				
CT and NG	1.17	1.12-1.23	1.14	1.09-1.19
TV	1.26	1.20-1.33	1.44	1.37-1.51
FEMALES				
CT and NG	1.07	1.02-1.14	0.96	0.91-1.01
TV	1.14	1.07-1.21	1.23	1.16-1.31
MALES				
CT and NG	1.36	1.25-1.47	1.37	1.27-1.49
TV	1.43	1.32-1.55	1.69	1.56-1.84



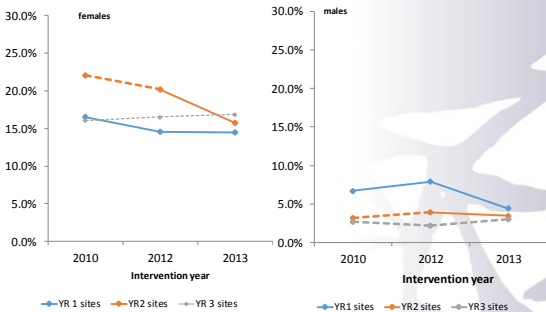
NG prevalence by year females



NG prevalence by year males



TV prevalence by sex and year



Relative prevalence by intervention year

PREVALENCE	Yr1	95%CI	Yr2	95%CI
OVERALL				
Chlamydia	0.97	0.70-1.32	1.76	1.21-2.55
Gono	0.84	0.59-1.20	0.94	0.67-1.33
Trich	0.95	0.72-1.25	0.95	0.72-1.24
FEMALES				
Chlamydia	0.98	0.65-1.50	2.106	1.27-3.49
Gono	0.8	0.48-1.33	0.99	0.62-1.59
Trich	0.81	0.59-1.11	0.91	0.68-1.20
MALES				
Chlamydia	0.91	0.55-1.50	1.48	0.85-2.57
Gono	0.84	0.50-1.41	0.83	0.50-1.38
Trich	1.91	0.83-4.41	0.93	0.34-2.50

Discussion

- Enormous effort; CQI shows some promising results especially if driven internally
- Significant increases in testing relative to control sites however marginal reduction in prevalence
- Combined STI prevalence highlights significant burden of disease in remote communities
- Prevalence methodology difficult in this setting
- Effects for a fully integrated CQI program will take multiple years for effect
- Integration of CQI to a PHC responsibility is underway
- There remain many questions??? Younger aged strategies, increased frequency testing prevalence study vs positivity, the appropriate mix of strategies

Acknowledgements

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