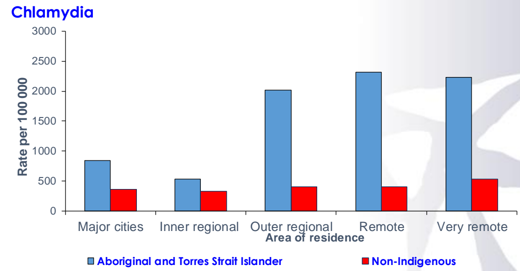
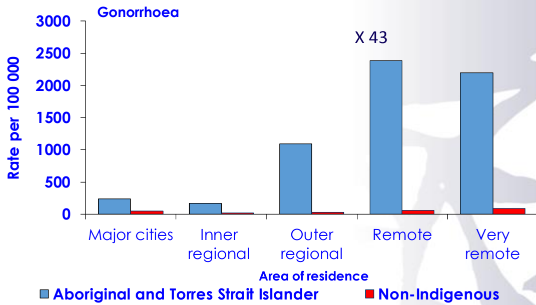
Supporting primary health care services to address endemic rates of STIs: findings from the STRIVE trial
A/Prof James Ward

Chlamydia by remoteness



Gonorrhoea by remoteness



STRIVE

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

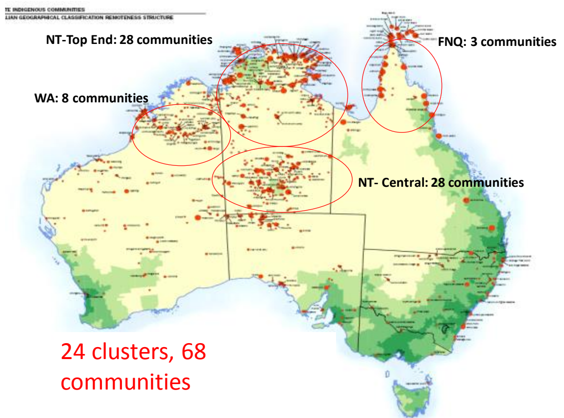
5 year project

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



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

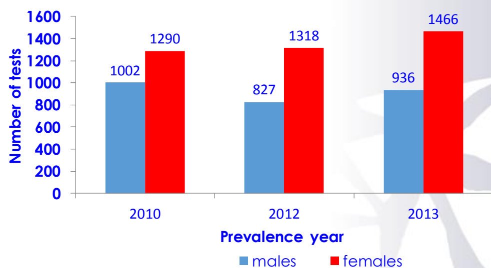
STRIVE field activity

- 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

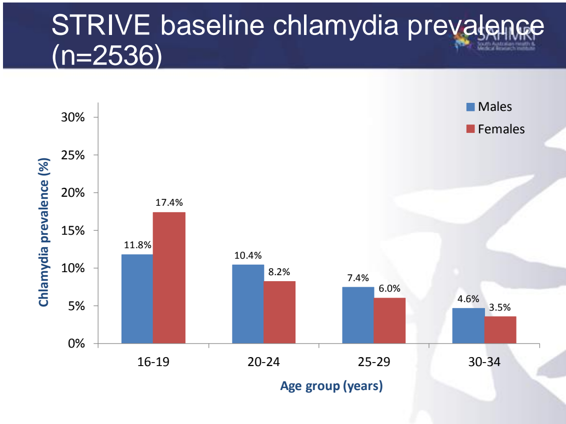
- Defined period each year 2010, 2012, 2013
- Aimed to offer testing to all clients attending in the age group 16-34
- Quotas for each service according to cluster size
- Broken down by sex and age group
- Relied on PHC staff to conduct prevalence study

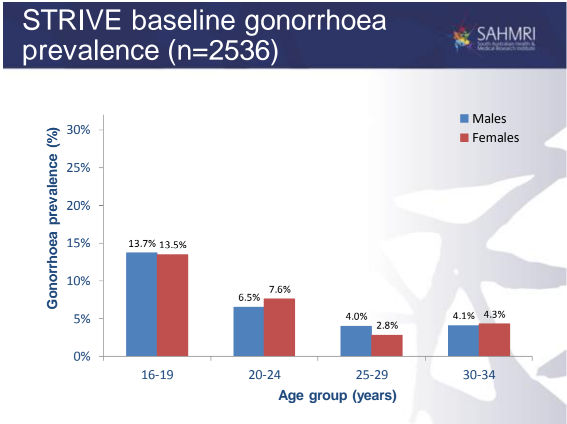
Number of prevalence study tests per year

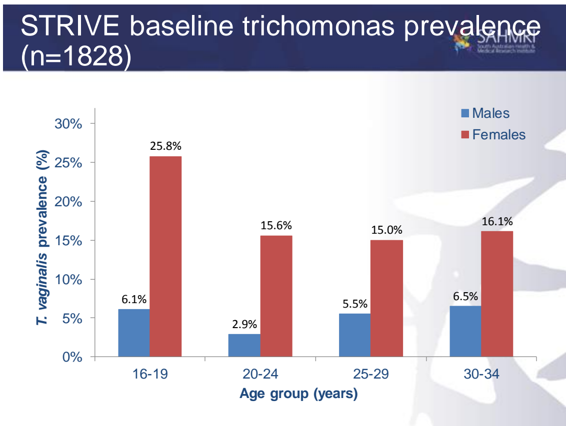


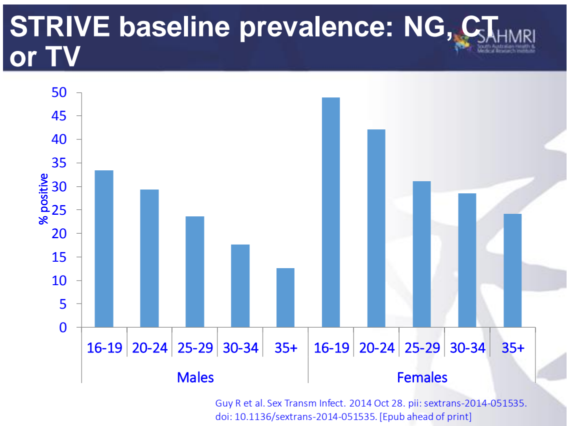
Average age of clients aged 16-34 yrs of age

	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

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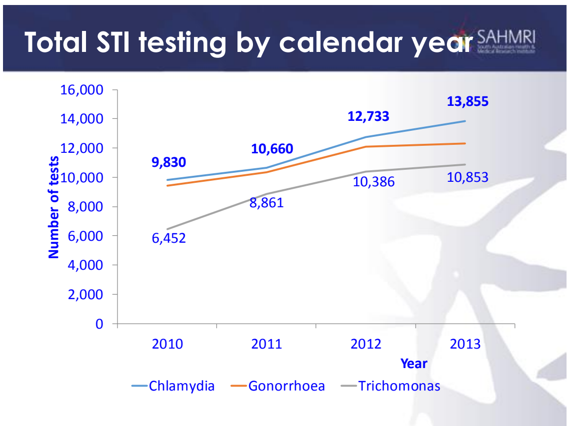
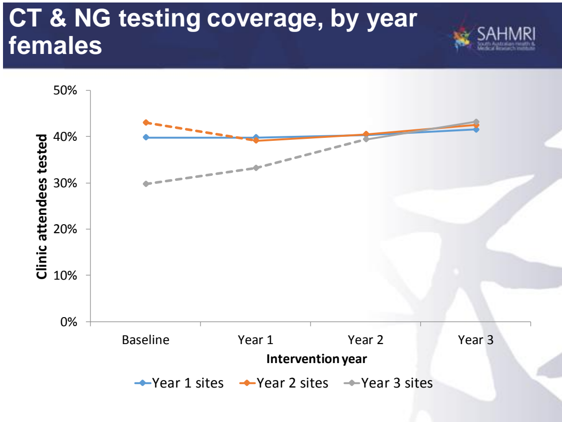
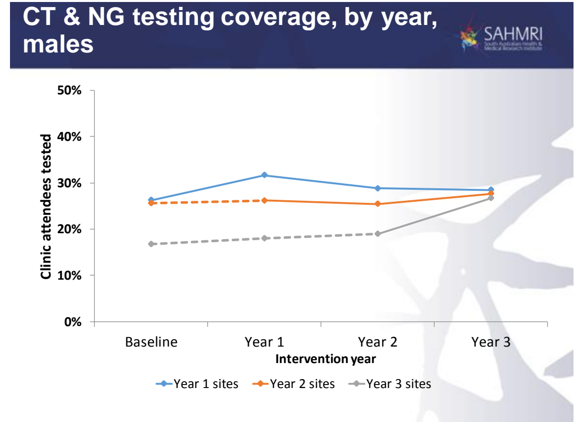
- **Total testing increase**

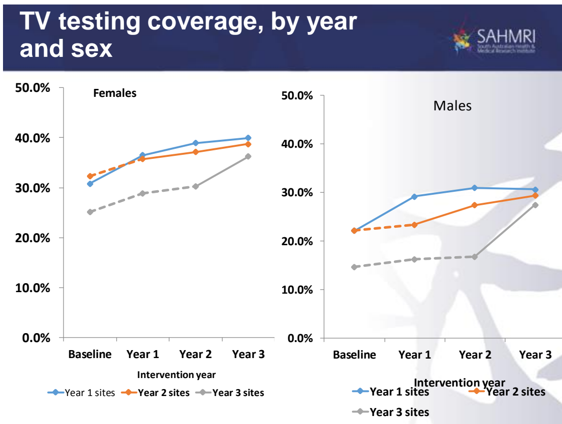
Two time points for comparison:

- **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



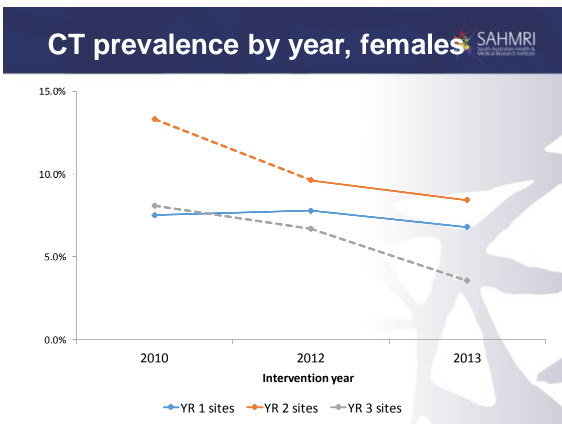


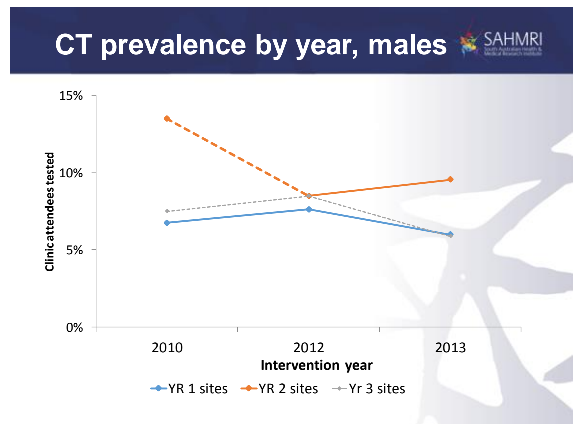




Relative proportion tested by intervention year

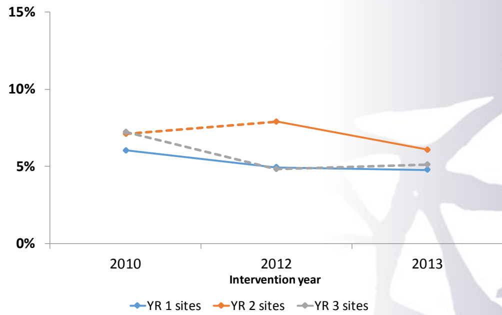
TESTING COVERAGE	Yr1	95%CI	Yr2	95%CI
OVERALL				
CT and NG	1.17	1.12-1.23	1.14	1.09-1.19
TV	1.26	1.20-1.33	1.44	1.37-1.51
FEMALES				
CT and NG	1.07	1.02-1.14	0.96	0.91-1.01
TV	1.14	1.07-1.21	1.23	1.16-1.31
MALES				
CT and NG	1.36	1.25-1.47	1.37	1.27-1.49
TV	1.43	1.32-1.55	1.69	1.56-1.84





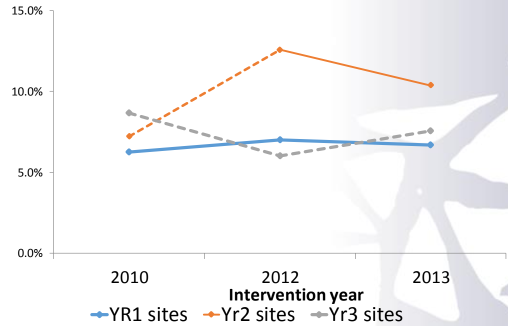
NG prevalence by year females

SAHMRI



NG prevalence by year males

SAHMRI



TV prevalence by sex and year

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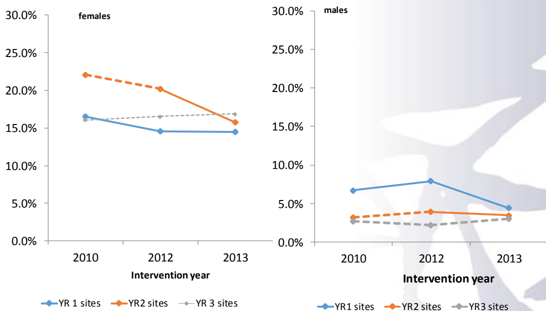

Relative prevalence by intervention year

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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

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- **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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STRIVE PARTNERS

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STRIVE EXECUTIVE COMMITTEE:

Nathan Ryder
Liz Moore
Stephanie Trust
Amanda Sibosado
Jackie Mein
Amanda Lingwood
Katy Crawford