

Improving sexual health outcomes for young Aboriginal and Torres Strait Islander people in the journey to adulthood.

Overview of Presentation



Acknowledgements

- Research journey so far
- Access to health services data
- Testing
- Positivity/Prevalence data
- Where to from here?

Journey so far!

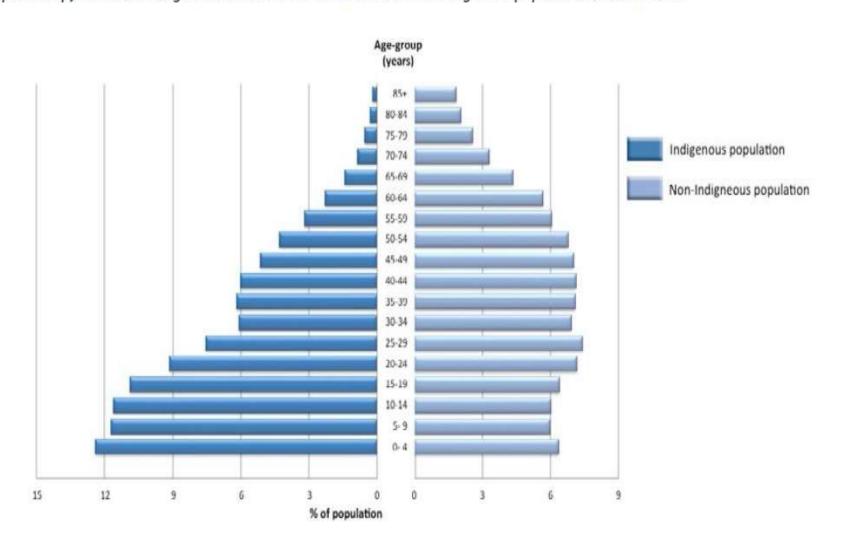


- STRIVE STRIVE PLUS (65+ remote)
- GOANNA- National behavioural
- TTANGO & TTANGO2
- CRE in Sexual Health (4 ACCHS urban and regional)
- CQI project-4 ACCHS NSW
- Mathematical modelling (Overall POC, Mobility, ITT)
- NG Resistance monitoring & surveillance
- EPIDEMIOLOGICAL STUDIES
- Contributed significantly to evidence base

Population pyramid Aboriginal vs non Indigenous Australians

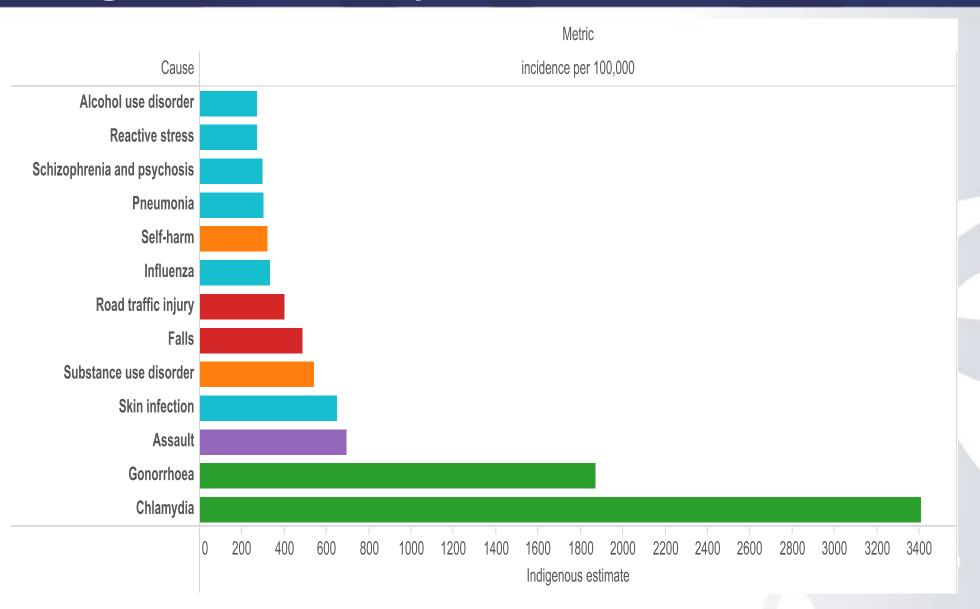


Figure 1. Population pyramid of Aboriginal and Torres Strait Islander and non-Indigenous populations, 30 June 2011



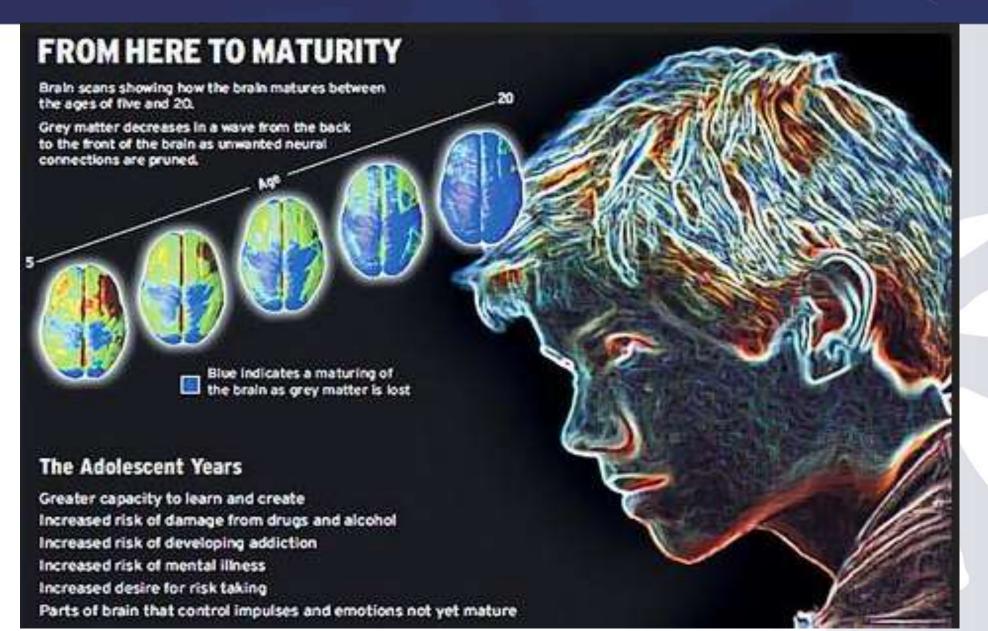
Leading incident conditions Indigenous 10 – 24 years





Importance of health and wellbeing





Health care needs of young people



Young people generally have acute health-care needs.

However also require early and effective responses to the many health problems that emerge in adolescence such as

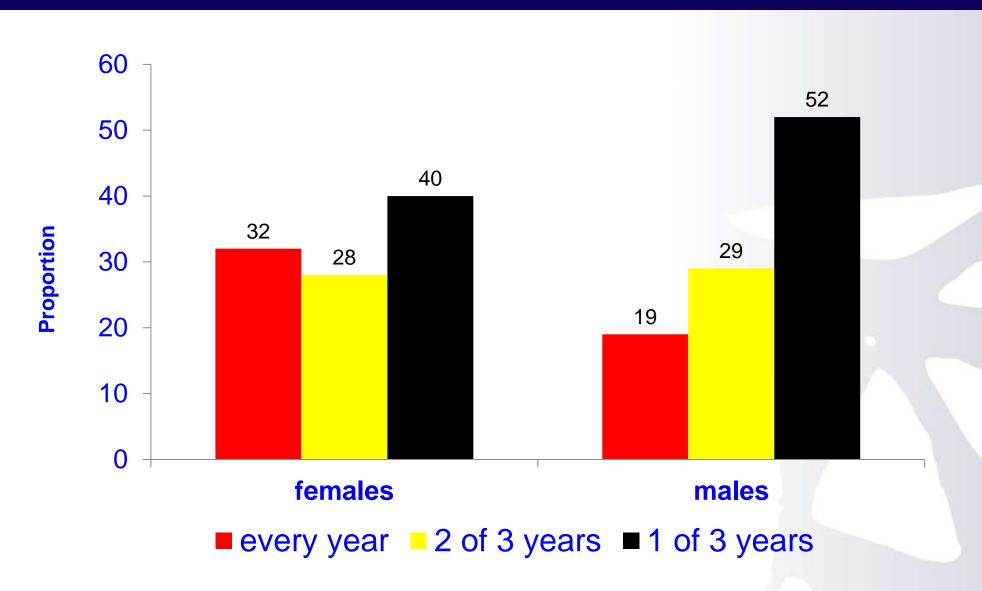
- STIs & BBVs
- Social and emotional wellbeing and
- substance use issues

The inexperience of adolescents places particular responsibility on health-care providers to identify young people's conspicuous and emerging health-care needs.



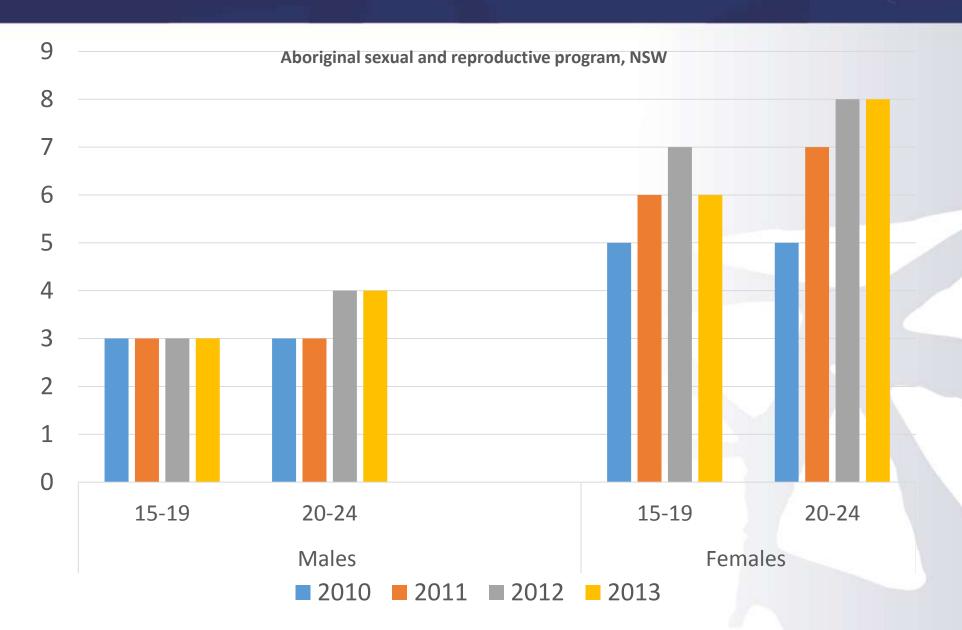
ACCESS to HEALTH SERVICES

SHIMMER: Health care attendance over 3 years, 4 regional AMS in NSW



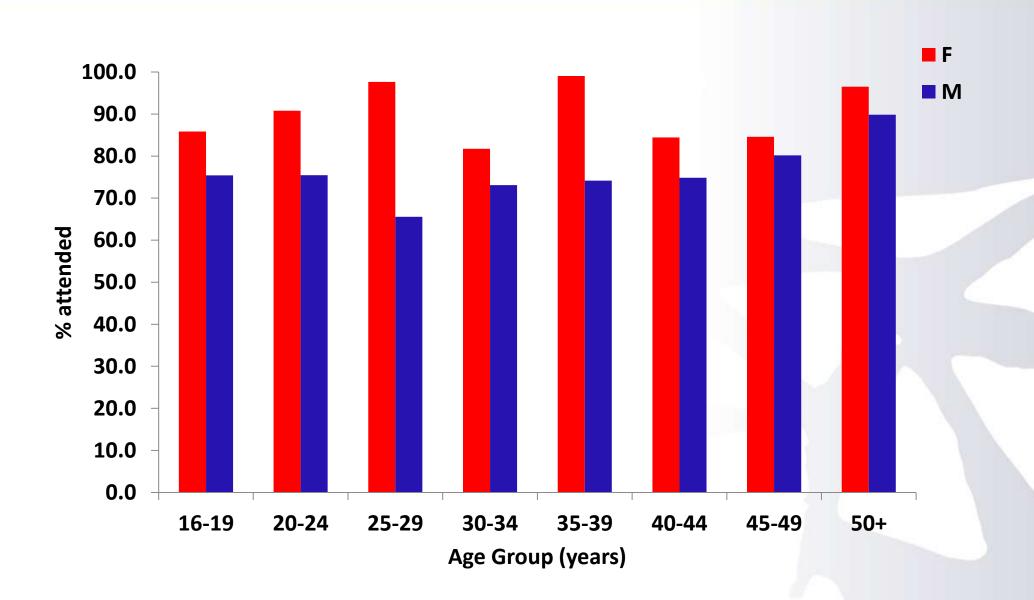
Health care access NSW sites





Health service use, by sex and age, 2010 (FNQ)





Access Summary



Men accessing clinics

Do so ~ one third less than women

Often with symptoms (prevalence study less cases detected than in usual period

Attendance increases with age



STI Testing Outcomes

STI testing

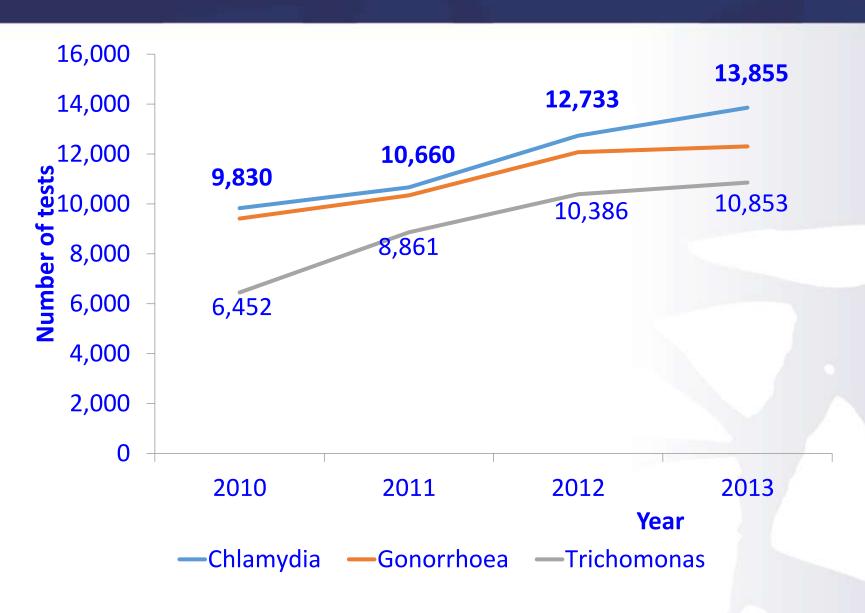


Clinical guidelines

- 1. Guidelines recommend annual testing of 15-29 year olds for chlamydia
- 2. Test for reinfection
- 3. Full STI screening after a positive diagnosis

Total STI testing by calendar year





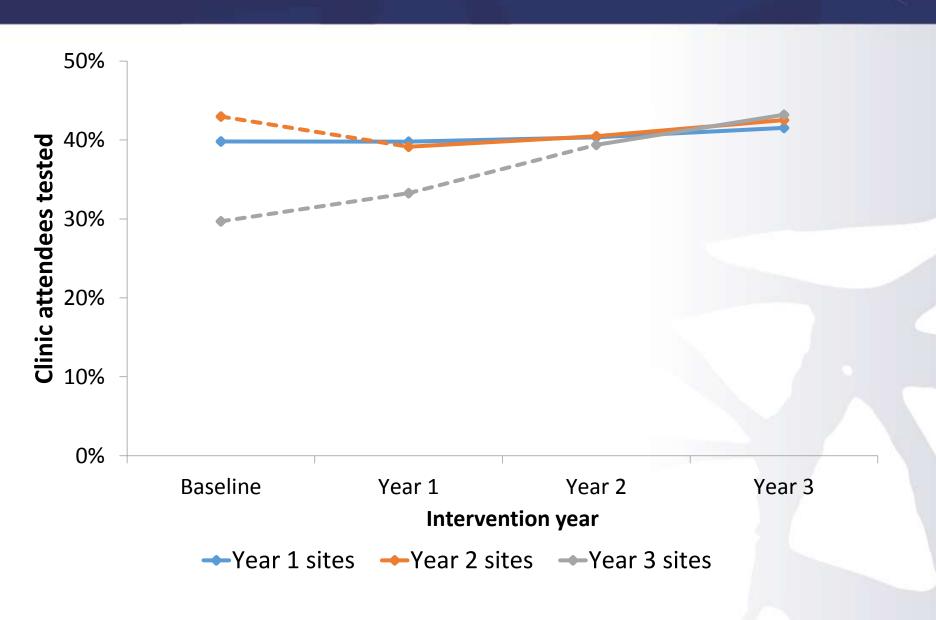
Relative proportion tested by intervention year



| 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 |

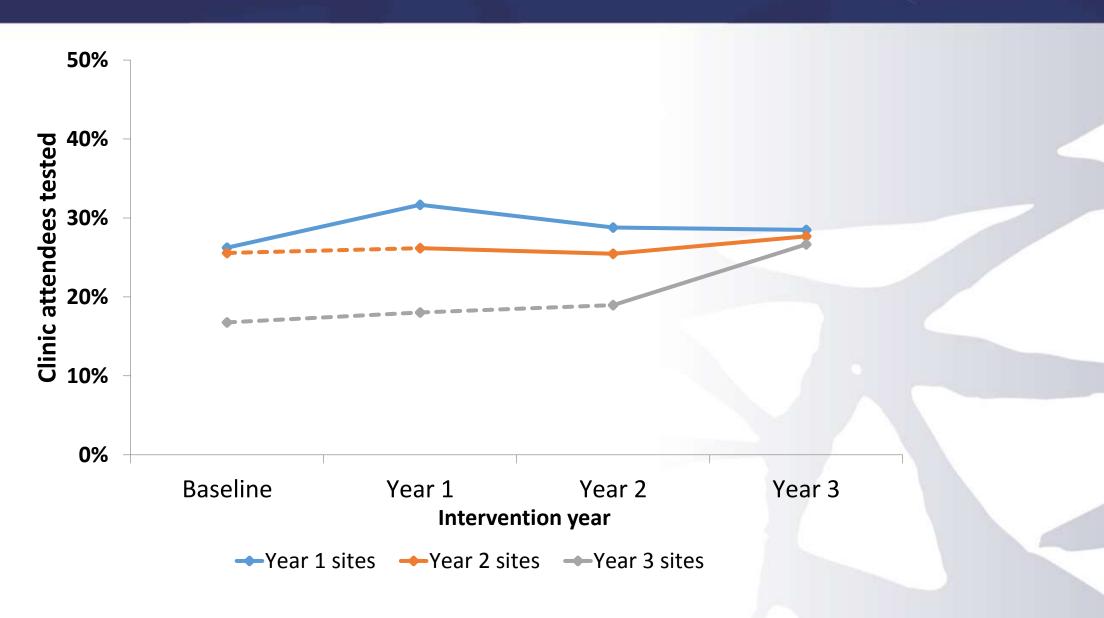
CT & NG testing coverage, by year females



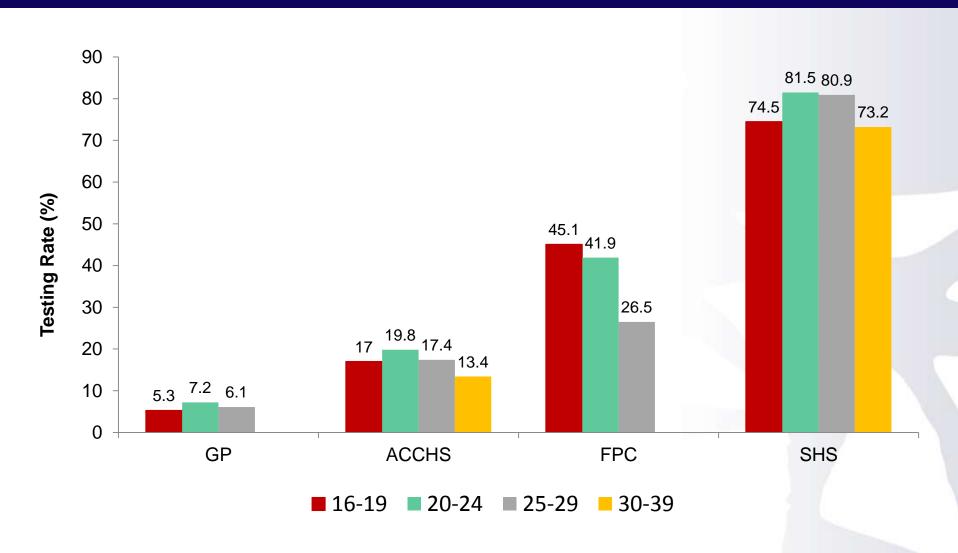


CT & NG testing coverage, by year, males



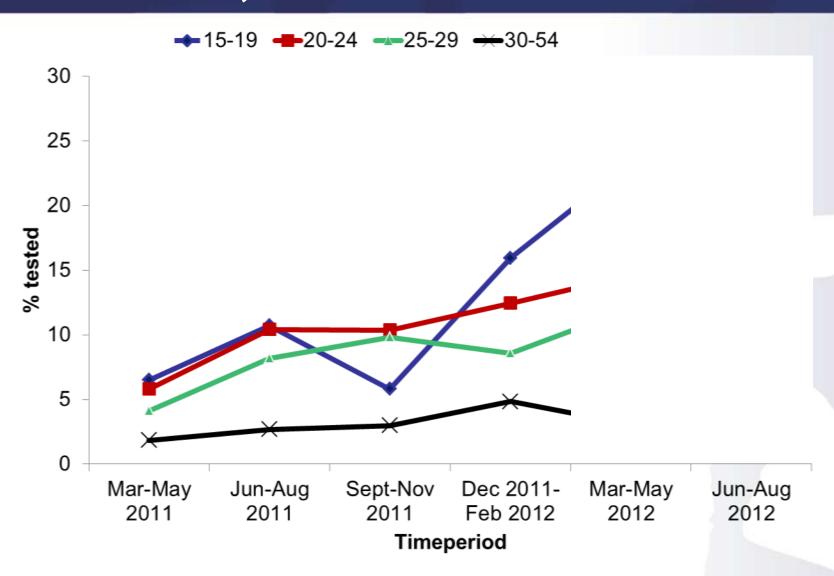


ACCESS: Chlamydia testing rate by service type, 2009



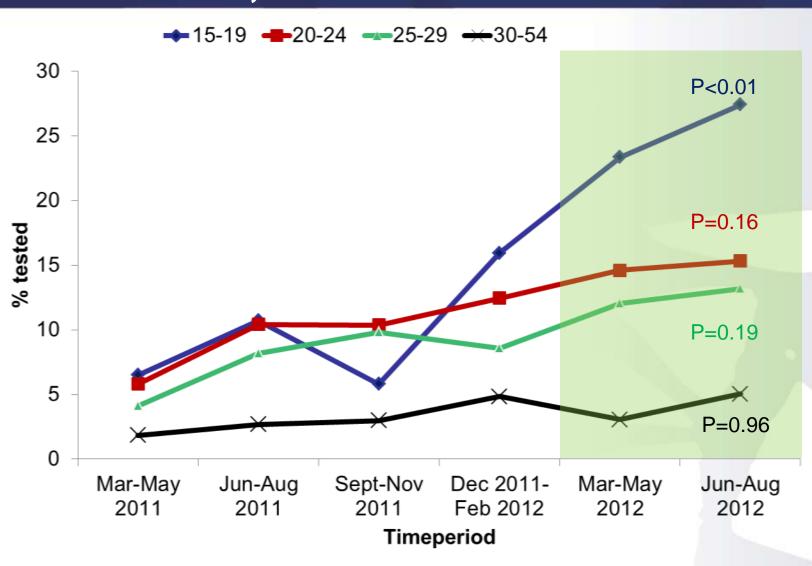
% females tested for chlamydia, 2011-2012 n=6,259





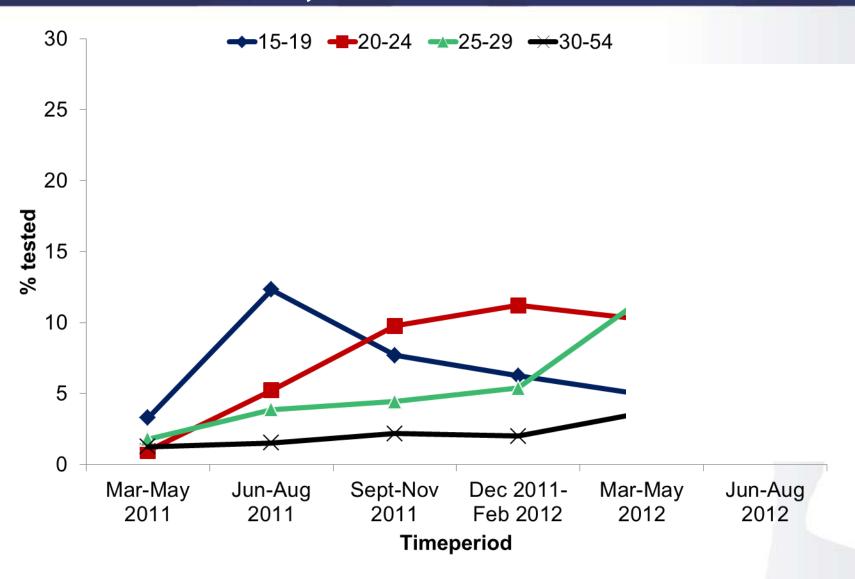
% females tested for chlamydia, 2011-2012 n=6,259





% males tested for chlamydia, 2011-2012 n=6,259

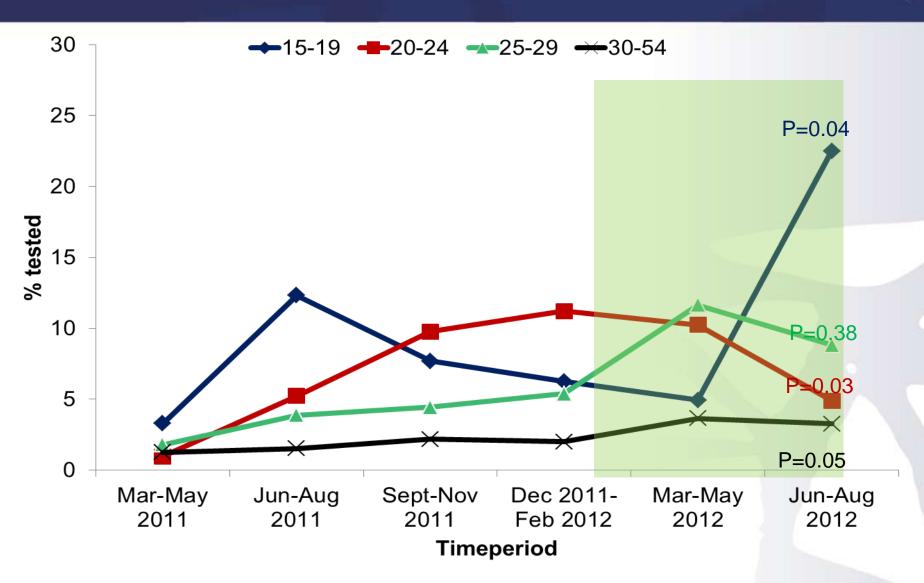




Graham, BMC Inf Dis 2015

% males tested for chlamydia, 2011-2012 n=6,269



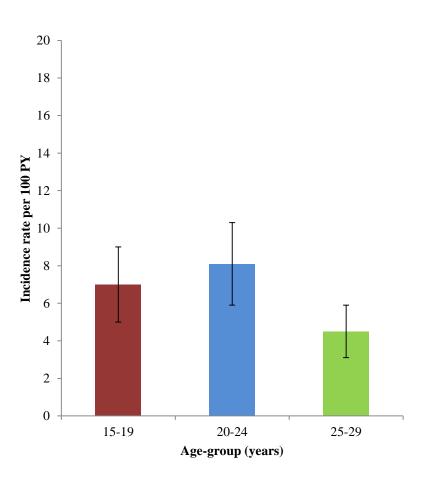


Graham, BMC Inf Dis 2015

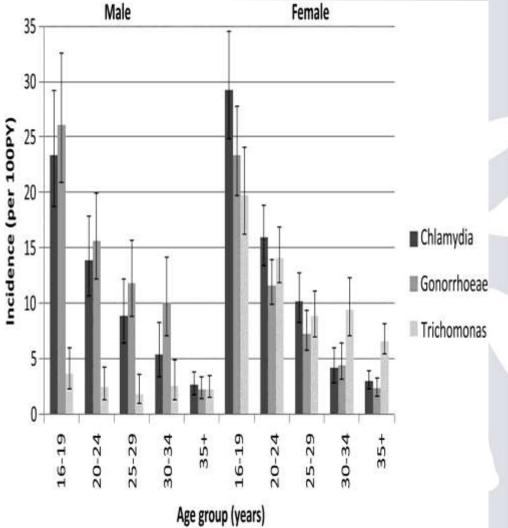
Incidence data



SHIMMER NSW

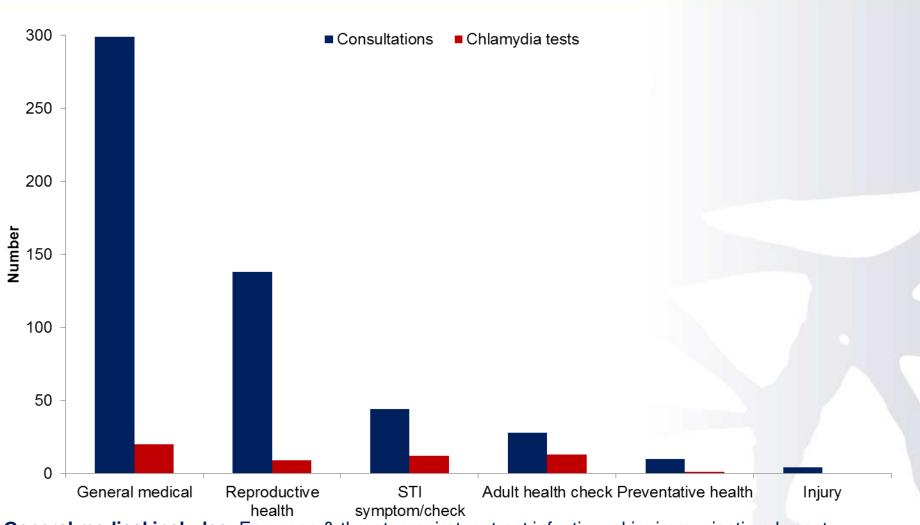


STRIVE



Primary reason for consultations & chlamydia tests in females, 2011 (Audit) n=523



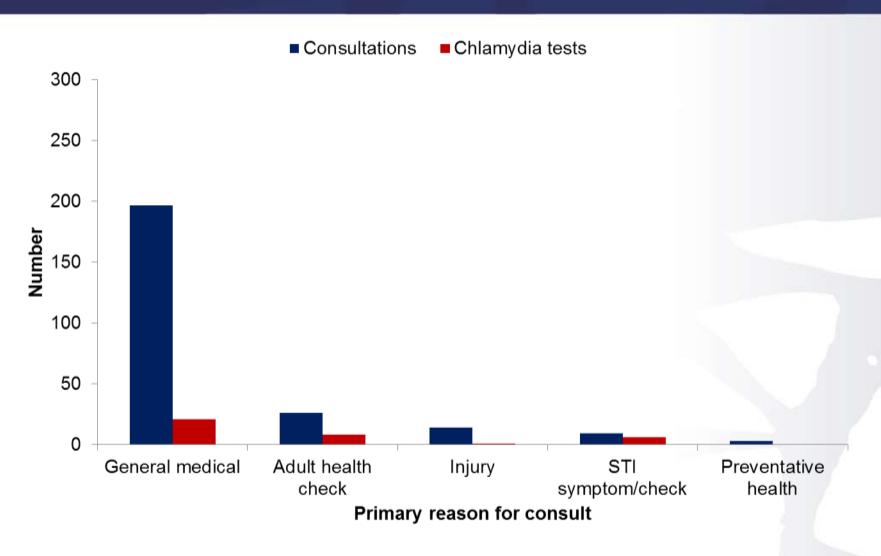


General medical includes: Ear, nose & throat includes: Ear, nose & throat

Reproductive health includes: pregnancy testing, contraception

Primary reason for consultations & chlamydia tests in males, 2011 (n=249)





General medical includes: Ear, nose & throat, respiratory tract infection, weight loss, back pain, smoking, epilepsy, boostrix & medical certificate.

Where are the gaps- STIs?



Testing for STIs

Recommendation is all 16-29 year olds test annually for STIs and more often where prevalence is higher What usually occurs- ranges (5%- 40%) of people tested

Testing for re-infection

Recommendation that all be tested around 3months after a + ve diagnosis

Ranges (20%- 40%)

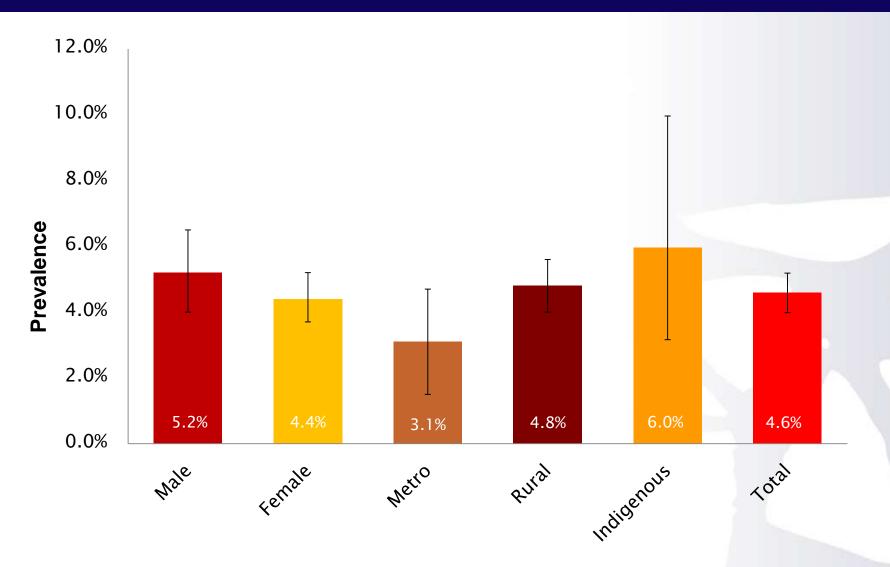
Context of testing

Aside from antenatal testing and a small proportion of STI tests done during 715s very little testing occurs opportunistically particularly in urban and regional settings

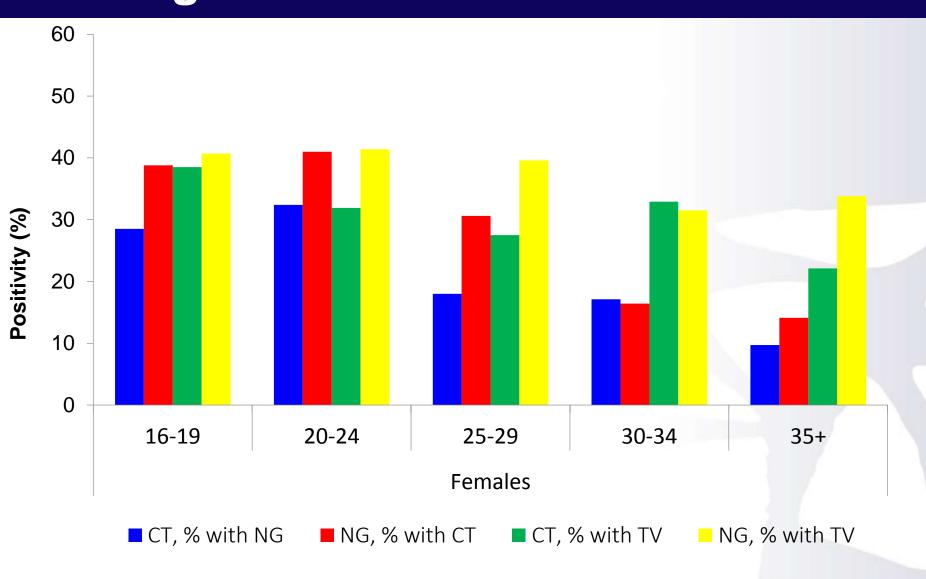


STI Positivity Prevalence

ACCEPt: Chlamydia prevalence in 16-29 year olds

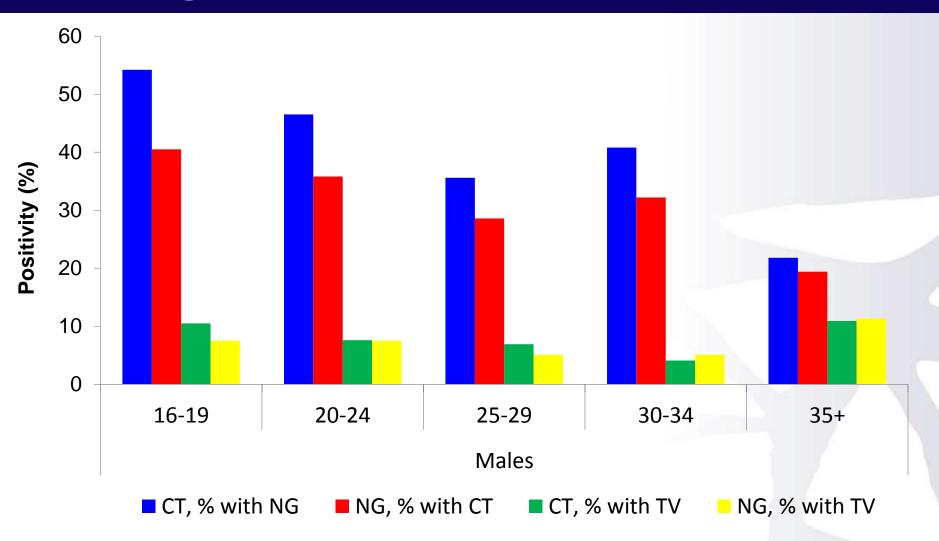


STRIVE STI co-infections in remote Aboriginal communities: females

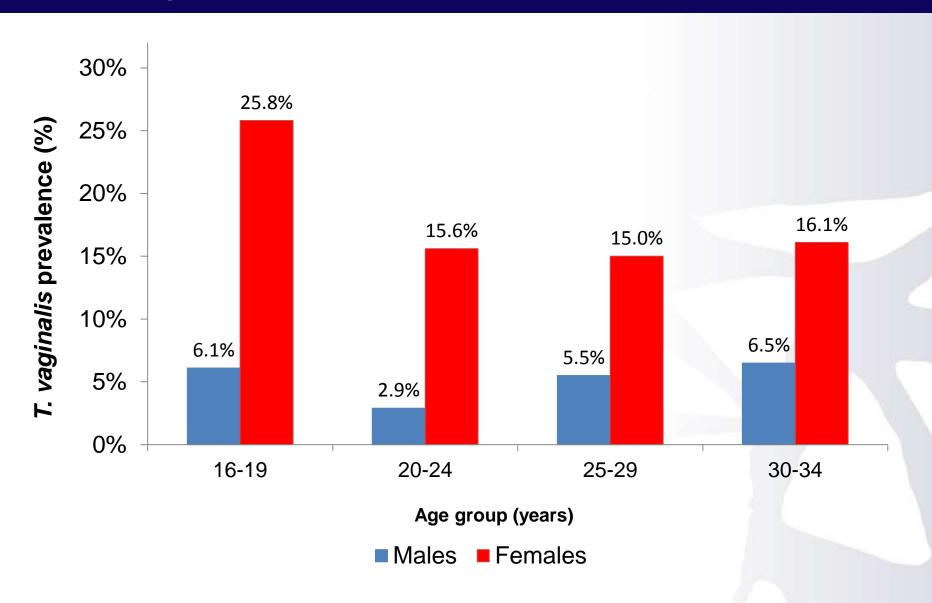


Guy et al STI 2014

STRIVE: STI co-infections in remote Aboriginal communities: males



STRIVE: Trichomonas prevalence in 16-34 year olds, 2010 (n=1828)



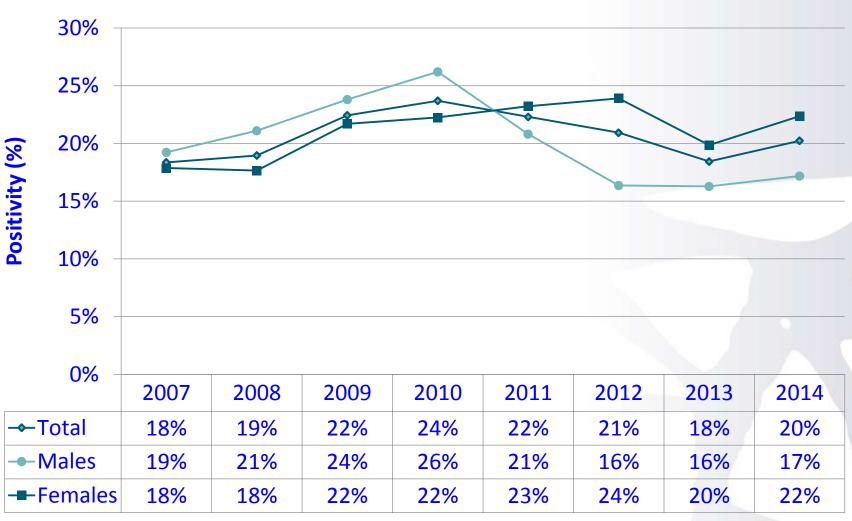
Relative prevalence by intervention year



| 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 |

Chlamydia positivity in A&TSI 15-29 year olds attending SHCs, 2007-2014, by sex

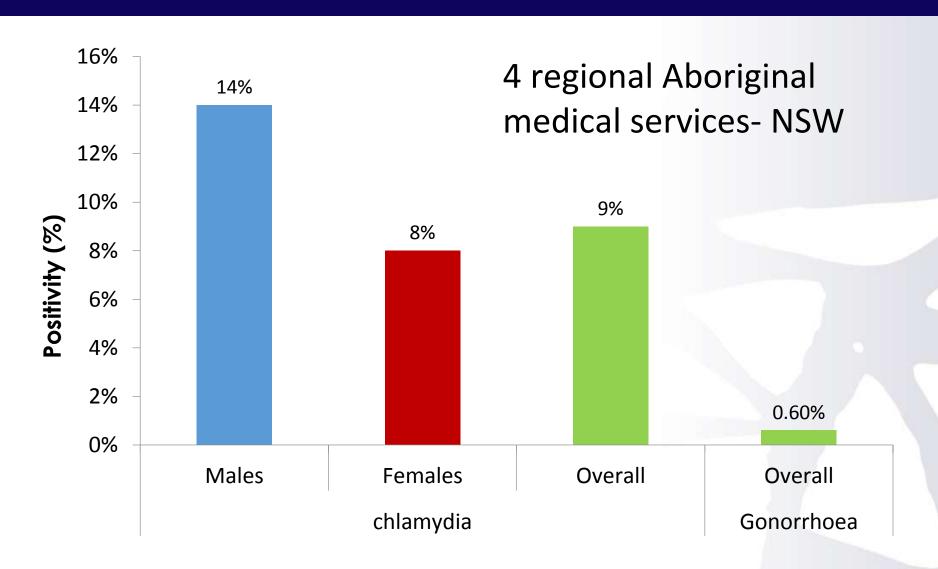




Year

Source: ACCESS 2015

SHIMMER: CT and NG positivity



Summary Positivity/Prevalence



Disparate rates of diagnosis between non Indigenous and Indigenous young people

Highest prevalence of STIs occur among 16-19 year olds irrespective of setting

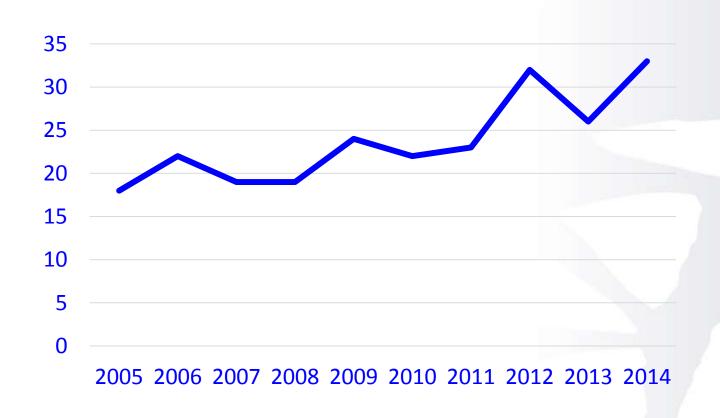
Higher rates in remote communities, including high prevalence and incident infections

HIV and STIs



- Strong evidence indicates that both ulcerative and non-ulcerative STDs promote HIV transmission by augmenting HIV infectiousness and HIV susceptibility via a variety of biological mechanisms.
- The risk estimates found in numerous studies from four continents which range from 2.0 to 23.5, with most clustering between 2 and 5.
- Owing to the greater frequency of non-ulcerative STDs in many populations, these infections may be responsible for more HIV transmission than genital ulcers.

HIV diagnosis among Aboriginal Australian SAHMRI



STI and HIV testing



| | Any + STI test | HIV and syphilis testing within 30 days of any positive STI test (incl. same day) | | HIV and syphilis testing within 30 days of any positive STI test (excl. same day) | |
|---------|-------------------|---|------------------------------|---|------------------------------|
| | N | HIV test <30 days n (%) | Syphilis test <30 days n (%) | HIV test <30 days n (%) | Syphilis test <30 days n (%) |
| Overall | 15260 | 4,858 (32%) | 6727 (44%) | 854 (6%) | 1099 (7%) |
| Sex | | | | | |
| Male | 4190 | 2035 (49%) | 2355 (56%) | 208 (5%) | 209 (5%) |
| Female | 11055 | 2815 (25%) | 4361 (39%) | 646 (6%) | 889 (8%) |

Where are the gaps?



HIV testing after a +ve STI diagnosis – 100% recommended

Ranges from 20%- not higher than 30%

Most done on same day as initial STI tests (<10% done within 30 days)

Gender differences

What are the options?



| Strategies | Evidence | Limitations strengths |
|--|---|--|
| Mass treatment of communities | Resistance, when to stop | Coverage, logistics |
| Periodic presumptive treatment | Resistance, when to stop | Who to target |
| Increase frequency of testing | | Change guidelines – burden on PHC |
| Screening programs with regular opportunistic testing | Nganampa Health – achieved reductions in NG, TV and CT and Syphilis | All communities need to be on same strategy - works better when "owned" by service/community |
| CQI | Good for those who come to clinic | Marginal impact in high prevalence areas |
| POC machines | Ditto | Improves testing rates of people attending clinic |
| Community education – behavioural change- symptom recognition- clinic attendance | | Long term but required |

Lets not forget addressing SDOH, Alcohol restrictions

Discussion-Understanding more of the population



From GOANNA Study n=2877

Median Age 21

59% reported being single and of the 40% who said they were in a relationship 24% were living with their partner and 16% not

91% reported having sex in last year

Of these 69% reported last sex was with their partner-(increased with age)

Single life reduced with age

67% (16-19 yo); 53% (20-24 yo); 45% (25-29 yo)

AOD use at last sex highest in 16-24 yo



Early sexual debut – testing earlier for sexually active young median age 15 for sexual debut (IQR 13-17)

Core transmitters

Repeat infections

Impact of only targeting 13-24 year olds

Discussion So where do we go?



- Combined STI prevalence highlights significant burden of disease in remote communities
- Models of care to increase males attendance and testing rates when they do attend
- Critical think about prioritising right age
- Increased frequency testing and its impact
- A set of national reportable STI indicators (coverage, interval time to treatment, re-testing, HIV concordance but also could include prevention indicators e.g NSPs and condoms)
- CQI shows promising results especially if driven internally
- Systems are req'd to offer STI testing and management to target age population (prompts, specimen collection in clinic, policy, data extraction, pathology data)

Discussion Rethinking Strategies



Data extraction from PMS to drive improvements in testing and management of STIs and BBVs

Needs to be standardised what is being collected so benchmarking can occur

Discussion- new strategies



Innovative projects are required such as

- staff trained particularly in opposite gender consultations
- symptom recognition among patients
- Male health initiatives beyond AHC and adolescent health checks
- Incentives? (males and young people)

New Strategies



HIV

Thinking about health service systems to respond quickly after a Dx especially in regional and remote areas

Treatment as prevention is meaningless to Aboriginal Australians until we understand how PLWH are going





High level summit on rising HIV, sexually transmissible infections (STI) and viral hepatitis in Aboriginal and Torres Strait Islander communities

New Work – DoH



Syphilis Education Testing Campaign

- In response to syphilis outbreak
- Comprising TVC and Radio media buy
- Animation
- Peer online educators
- Zone and Regional Activation
- Commenced

Remote STI Initiative

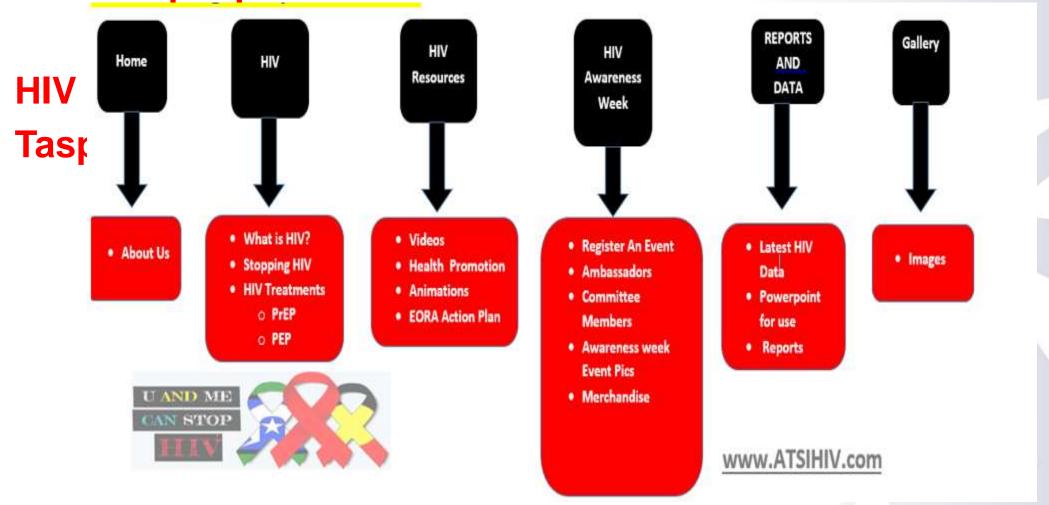


- Portal Website
- Go to place for resources information for community and professionals
- Clinician Video Podcasts
- Fact Sheets (for parents carers, teachers)
- Animations (TBD)
- Guidelines (All jurisdictions with remote)
- Peer Educators trial (10 communities)
- Health promotion posters (STIs and HIV with titles, key messages & call to action)
- Able to be modified to input own language and using own pics and with own logos)

HIV and Aboriginal Communities Website



Consolidated HIV Website for Aboriginal and Torres Strait Islander people



Where do we need change



- Still a long way to go in addressing inequity
- Need
 - +++Education outcomes
 - +++Cut through messaging
 - +++health literacy
 - +++ Rich qualitative data
 - +++ Health service delivery models
- Barriers and facilitators to service access
- Alternative models of service delivery
- Targeted and I/term programs (comparable to MSM)
- Positive youth development initiatives- focus on strengths!