



Results from EPIC-NSW, a large PrEP access study

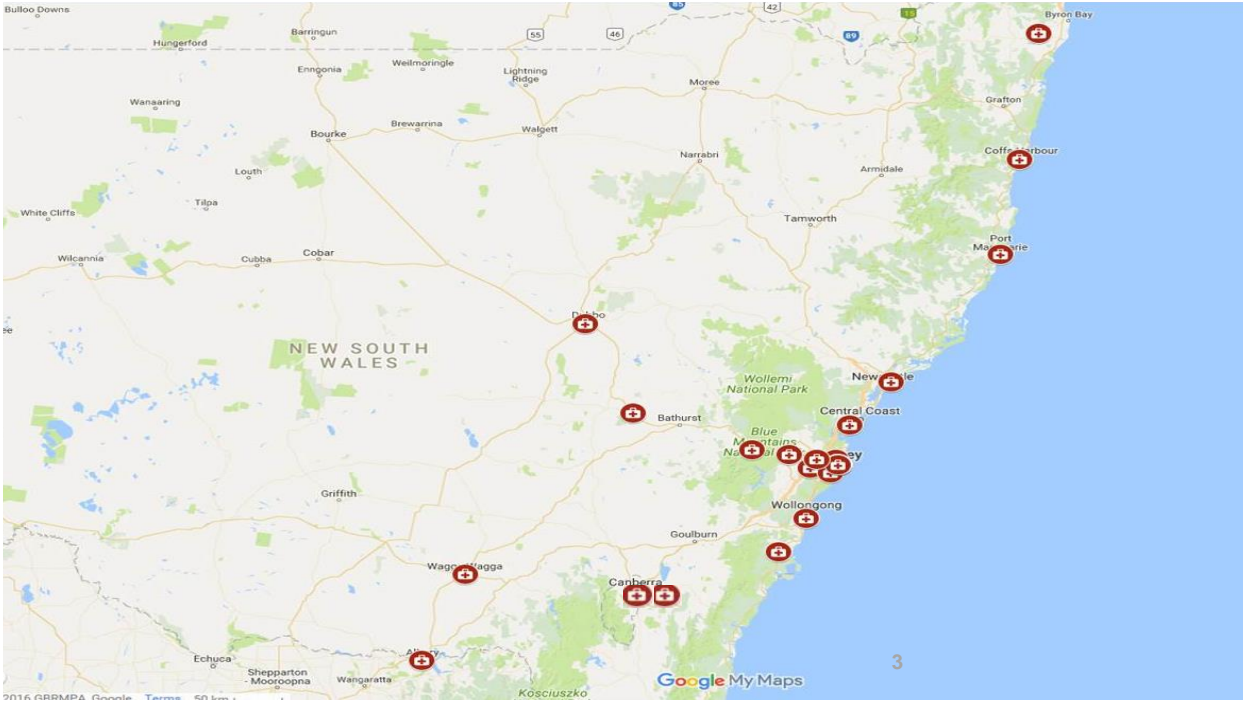
Rebecca Guy on behalf of the EPIC-NSW team

ASHM, Sep 2018

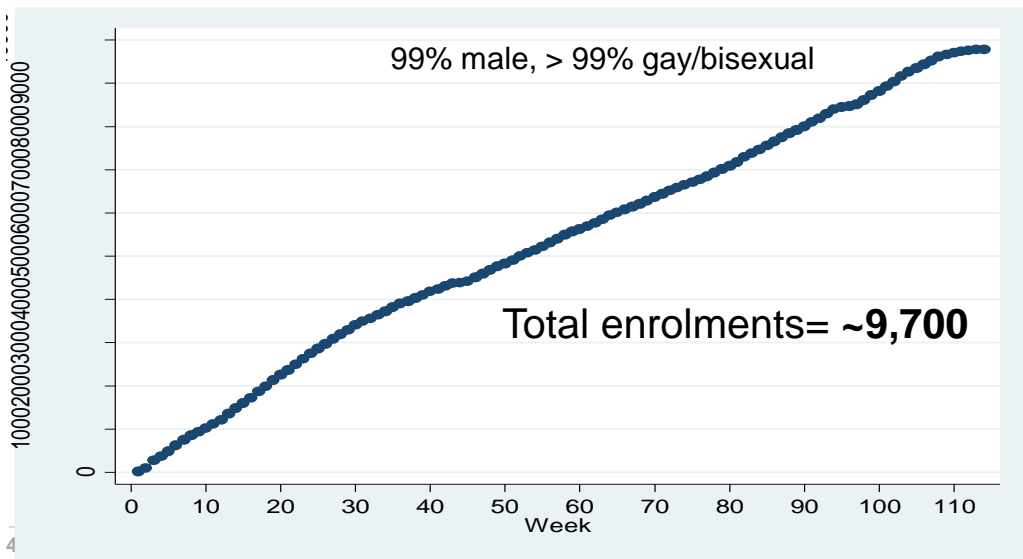


EPIC-NSW: Expanded PrEP Implementation in Communities

- Implementation study of TDF/FTC PrEP
- Targeted at those at high-risk, using local guidelines
 - Condomless sex with casual partners
 - Condomless sex with regular partner, detectable viral load
 - Rectal STI or syphilis
 - Methamphetamine use
- Commenced March 2016, initial target of 3700
 - expanded in October 2016 so that all eligible gay and bisexual men could receive PrEP as quickly as feasible
- 3-monthly follow-up with HIV and STI testing



EPIC-NSW weekly enrolments



Primary outcome 1: within cohort

- **3700 participants**
- **Expected ~66 new infections without PrEP**
- **2 confirmed new HIV infections**
 - 1 was dispensed but never commenced PrEP
 - 1 took no PrEP for months prior to infection
- **Incidence rate 0.05/100 person-years (95%CI 0.01-0.20)**

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Primary outcome 2: state wide changes

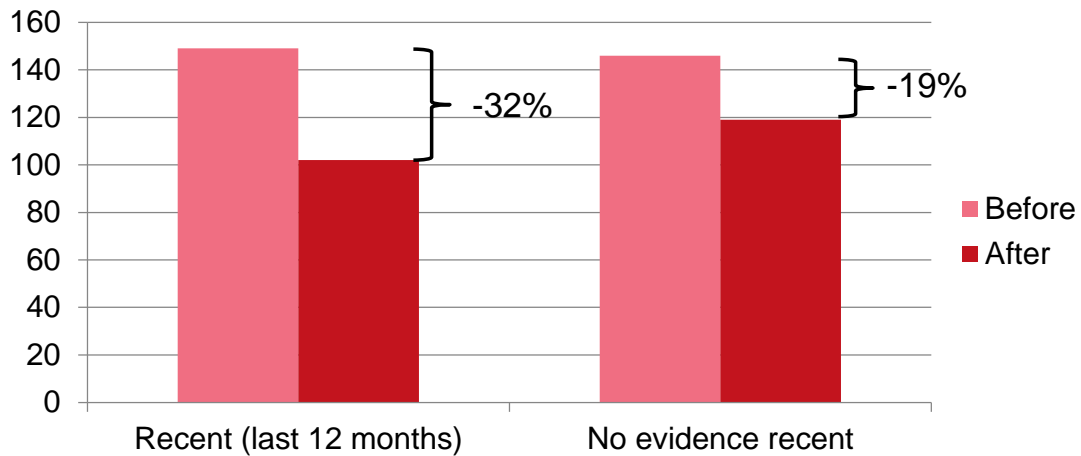
- **Population-wide (effectiveness) outcome:**
 - A before-after comparison
 - Change in HIV diagnoses in MSM in NSW surveillance data between
 - the twelve-months before recruitment commenced
 - the twelve-months after recruitment of 3700



7621 recruited by
31 Oct 2017

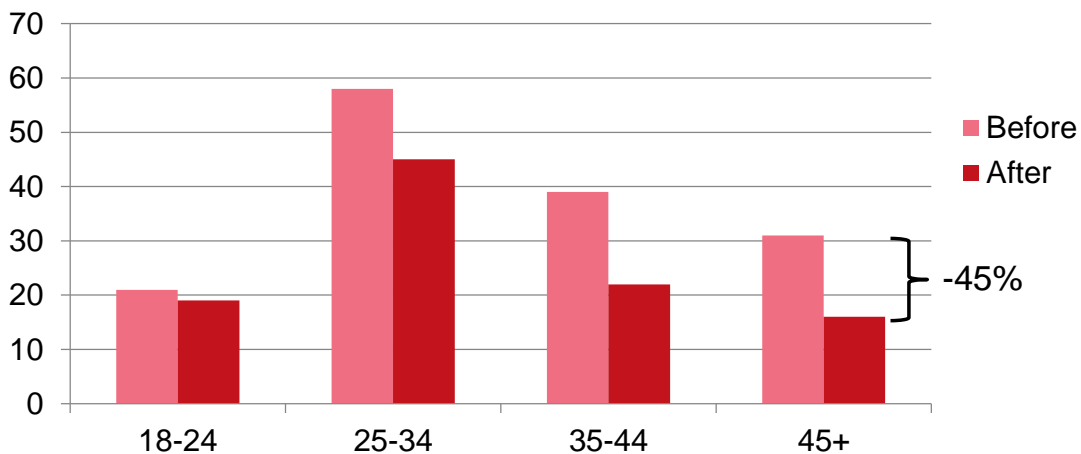
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Results: HIV infections in MSM in NSW before and after PrEP, by recency of HIV infection



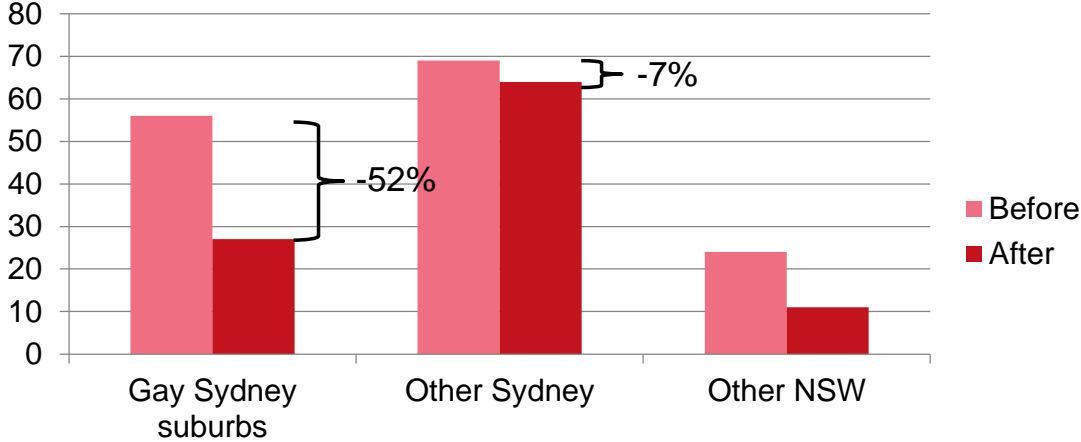
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Results: recent HIV infections in MSM in NSW, before and after PrEP, by age in years



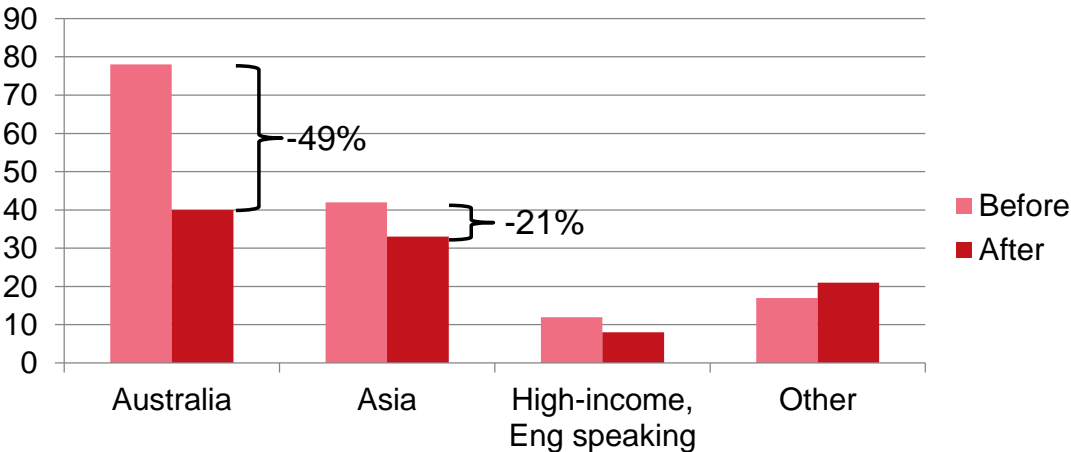
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Recent HIV infections in MSM in NSW, before and after PrEP, by area of residence



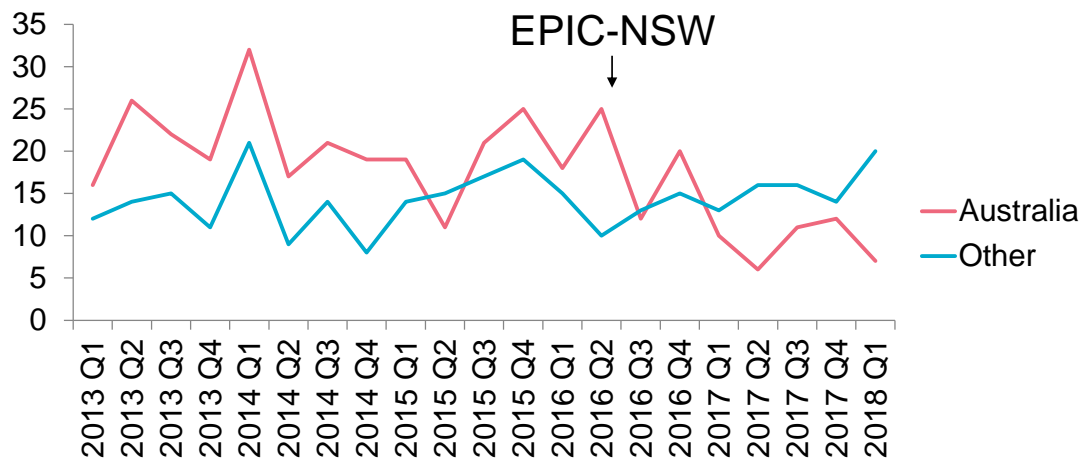
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Results: recent HIV infections in MSM in NSW, before and after PrEP, by region of birth



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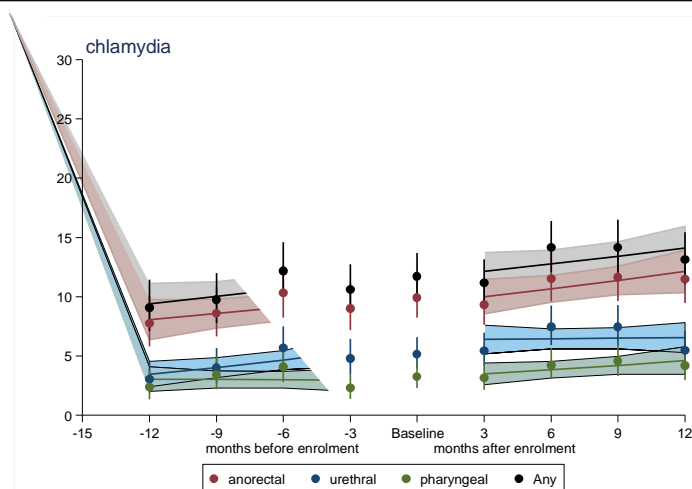
Results: recent HIV infections in MSM in NSW, by quarter, by country of birth, 2013-2018



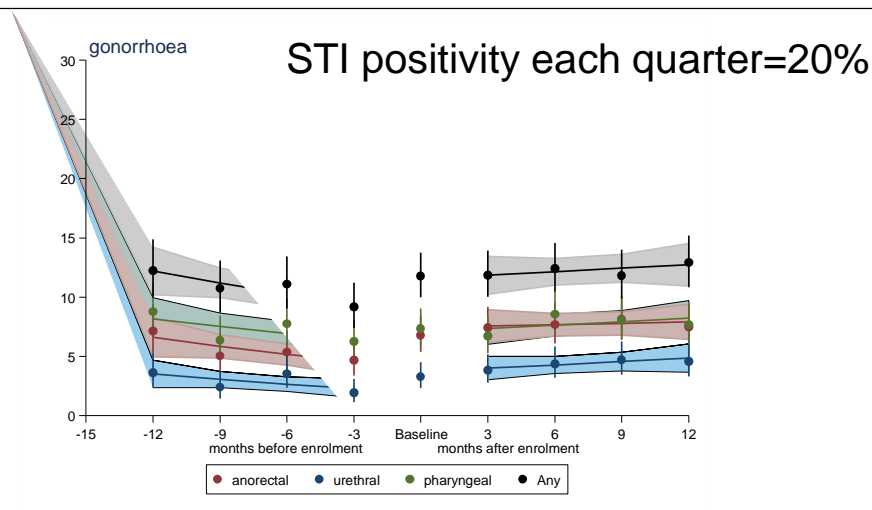
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NSW surveillance data report q1 2018

Chlamydia positivity (2+ tests prior to PrEP, no prior PrEP)



Gonorrhoea positivity (2+ tests prior to PrEP, no prior PrEP)



Conclusions: reductions in HIV diagnoses

- **Targeted PrEP roll-out at scale led to a substantial decline in new HIV infections at the state-wide level**
 - Dropped by 32% in the year following complete recruitment
 - An historically unprecedented reduction in recent infections
- **Least reduction in recent infections in**
 - Young gay and bisexual men
 - Gay and bisexual men living outside the Sydney “gay” suburbs
 - Non-English speaking overseas-born gay and bisexual men
 - Campaigns by ACON

Challenges for the future

- Guided by mathematical modelling, we need to reach 90% coverage of PrEP in higher risk HIV negative men
- Identify patients who would benefit from PrEP
 - Condomless sex with casual partners
 - Diagnosed with an STI
 - Methamphetamine use
 - Condomless sex with regular partner, detectable viral load
- Ensure full STI screening is conducted quarterly

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The EPIC-NSW Research team

Kirby Institute	NSW Ministry of Health	Site investigators	Site investigators
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The EPIC-NSW study team thanks the over 9,730 participants. EPIC-NSW is funded by the NSW Ministry of Health. We thank Gilead for providing a donation of Truvada for use in EPIC-NSW. Study drug is also purchased from Mylan pharmaceuticals.

The EPIC-NSW Site Coordinators



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