

# PrEP scale up in New South Wales

Andrew Grulich  
Kirby Institute, UNSW



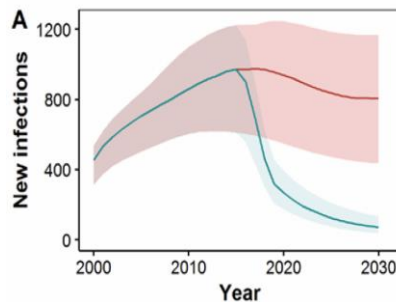
PositiveLifeNSW  
the voice of people with HIV since 1988



## Scale-up is guided by modelling

Modelling suggests...

- Target to high-risk gay men
- Aim for high coverage (90%)
- Roll-out PrEP ***quickly***
- Lower levels of roll out lead to much lower reductions in incidence
- **Herd protection** is a critical part of the population-level effect



*R Gray et al, Wednesday 230pm Royal Theatre*



## A targeted, high-risk approach to PrEP roll-out

Overall HIV incidence in gay men in Sydney is 0.9/100py

High Risk behaviour in last 6 months	Incidence per 100py*	95% CI
Condomless sex with HIV positive regular partner	5.4	2.8-10
Receptive condomless sex with casual HIV-positive/status unknown partners	2.3	1.5-3.6
Rectal gonorrhoea	7.0	2.3-21
Rectal chlamydia	3.6	1.3-9.5
Methamphetamine use	1.9	1.3-2.8

\*Incidence from the Health in Men cohort study, Sydney 2001-07



## A targeted, high-risk approach to PrEP roll-out: 2017 versus 2014 estimates

	2014 "highest risk"	2017 "all high risk"
CLAI with regular sexual partner who has detectable VL	any	no change
Receptive CLAI with casual partner	Frequent	any
Rectal gono/chlamydia, or syphilis	Last 12 months	No change
Methamphetamine	Frequent	any
"ongoing risk requirement"	>10 partners	Not required
Year of behavioural risk data	2014	2016
<b>Estimate</b>	<b>8.6%</b> <b>n = 3350</b>	<b>28%</b> <b>n = 9600</b>

# EPIC-NSW

A once a day pill that keeps you HIV negative

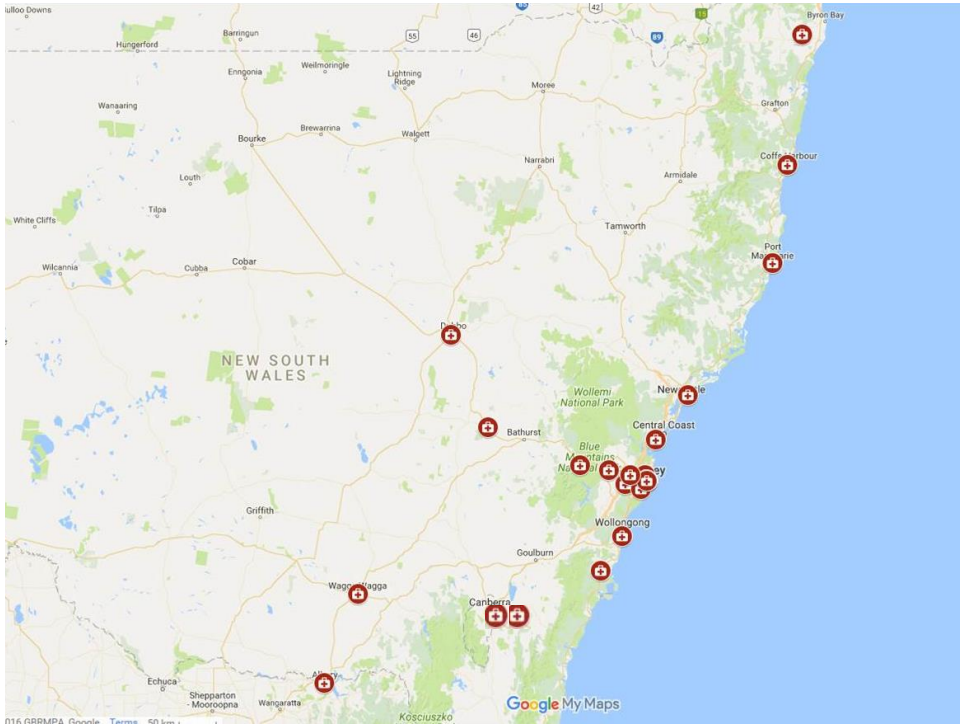
$$\left[ \begin{array}{c} \text{TEST} \\ \text{OFTEN} \end{array} \right] + \left[ \begin{array}{c} \text{TREAT} \\ \text{EARLY} \end{array} \right] + \left[ \begin{array}{c} \text{STAY} \\ \text{SAFE} \end{array} \right] = \left[ \begin{array}{c} \text{ENDING} \\ \text{HIV} \\ \text{2020} \end{array} \right]$$

Is PrEP for you? [endinghiv.org.au/prep](http://endinghiv.org.au/prep)

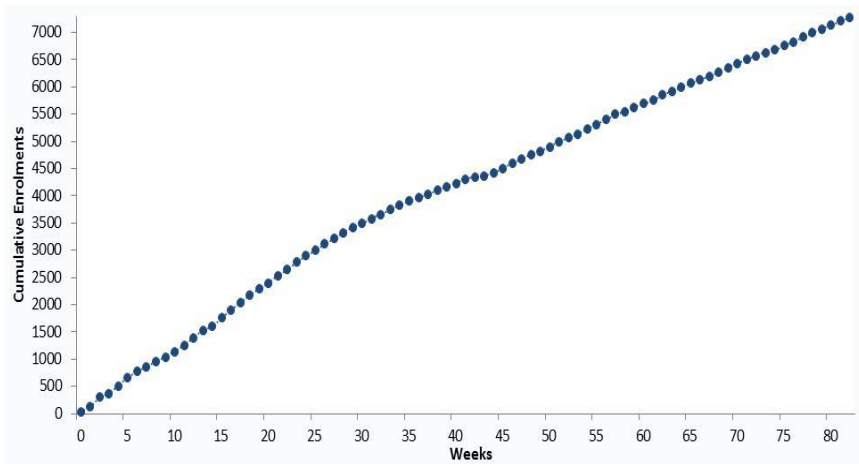


## Key design features of EPIC-NSW

- An implementation research project conducted within a clinical trial framework, commencing March 2016
- State-wide, in both public and private clinics
- Initial aim to have all GBM at high HIV-risk on PrEP by end 2016
  - **3700 men in a 10 month period**
- Simple for clinics: HIV/STI/kidney toxicity outcomes collected through electronic medical record systems
- Co-primary outcomes:
  - HIV incidence in the cohort and
  - HIV newly acquired diagnoses in the state



### Recruitment as at 30 September



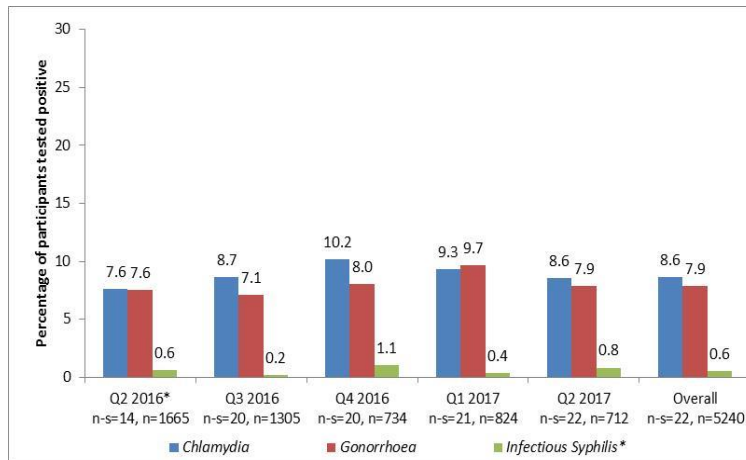
## Demographics of EPIC participants to September 30

Characteristic	%
<b>Gender</b>	
Male	98.9
Female	0.1
Transgender, male-to-female	0.8
Transgender, female-to-male	0.2
Other	0.1
<b>Sexual identity</b>	
Gay/Homosexual	93.8
Bisexual	5.1
Heterosexual	0.5
Other <sup>‡</sup>	0.6
<b>Age at enrolment (years)</b>	
< 20	1.2
20-29	28.3
30-39	34.8
40-49	22.0
≥50	13.7
<b>Total*</b>	<b>100.0</b>

## Demographics of EPIC participants to September 30

Characteristic	%
<b>Aboriginal /Torres Strait Islander status</b>	
Non-Indigenous	98.3
Aboriginal/Torres Strait Islander	1.7
<b>Country/Region of birth</b>	
Australia	61.0
Oceania	4.0
Asia	13.9
Northern America	2.9
South/Central America, Caribbean	3.6
Europe	11.3
Middle East	1.6
Africa	1.9
<b>Area of residence</b>	
Major cities	94.2
Inner Regional	5.3
Outer Regional	0.4
Remote	0.1

## STI prevalence at baseline



<http://www.health.nsw.gov.au/endinghiv/Documents/>

## System ready: life after EPIC-NSW

### A smooth transition to PBS-supplied PrEP

- Continuing monitoring of consenting individuals through data linkage
- Truly state-wide coverage of PrEP provision
- GP/pharmacy capacity building in PrEP provision, STI screening and management
- Equitable access as a key goal
  - Asian born gay and bisexual men
  - Young gay and bisexual men
  - Indigenous gay and bisexual men, transgender people, male sex workers

## The EPIC-NSW Research team



Kirby Institute	NSW Ministry of Health	Site investigators	Site investigators (cont)
David Cooper	Jo Holden	Debbie Allen	Nathan Ryder
Andrew Grulich	Christine Selvey	David Baker	David Smith
Rebecca Guy	Heather-Marie Schmidt	Mark Bloch	Emanuel Vlahakis
Jeff Jin	Dale Halliday	Katherine Brown	Don Smith
Janaki Amin	Kerry Chant	Christopher Carmody	Nick Doong
Iryna Zablotska	Bill Whittaker	Andrew Carr	David Townson
Barbara Yeung	<b>Community Organisations</b>	Kym Collins	Bradley Forssman
Ges Levitt	Nic Parkhill	Robert Finlayson	Daniel Chanisheff
Erin Ogilvie	Craig Cooper	Rosalind Foster	Gia Han Thai
Mo Hammoud	Levinia Crooks	Eva Jackson	Sarah Martin
Denton Callender	Matt Vaughan	David Lewis	Tuck Meng Soo
Lucy Watchirs-Smith	Karen Price	Josephine Lusk	Ben Anderson
Stefanie Vaccher		Anna McNulty	
Daminda Weerasinghe		Catherine O'Connor	
Nila Dharan		Phillip Read	

The EPIC-NSW study team thanks the over 7500 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



EPIC-NSW Site	Site Coordinator
Albury & Wagga Sexual Health Clinics	Alison Kincaid
Canberra Sexual Health Centre	Shannon Woodward
Clinic 16	Brett Hadlow
Coffs Harbour Sexual Health Clinic	Nives Houlihan
Crown St Medical Centre	Airisse Cortez
Dr Doong's Surgery	Shane Hewitt
East Sydney Doctors	Melissa Benson
Fountain Street General Practice	Anne Maree O'Brien
Green Square Health	Christina Van Prehn
Holden Street Clinic	Michael Williamson
Holdsworth House Medical Practice, Sydney	Annabelle Caspersz
Illawarra Sexual Health Clinic	Jodie-Lee Little
Interchange General Practice	Philip Habel
Kirketon Road Centre	Karen Chronister
Lismore Sexual Health Centre	Andrew Buggie
Liverpool Sexual Health Clinic	Almario Mangaran
Nepean Hospital & Blue Mountains Sexual Health Clinics	Adriana Trujillo
Newcastle Community Health Centre	Nathan Ryder (PI)
Macleay Street Medical Practice	David Townson (PI)
Orange & Dubbo Sexual Health Clinics	Roisin Dyer
Royal Prince Alfred Sexual Health	Brett Sinclair
Short Street Clinic	Damien Brown
St Leonards Medical Centre	Ben Andersen (PI)
St Vincent's Hospital	John McAllister
Sydney Sexual Health Centre	Ruthy McIver
Taylor Square Private Clinic	Phuoc Loc Le
The Albion Centre	Raghib Ahmad
Western Sydney Sexual Health Centre	Melissa Power