### **Enrolment characteristics of an Australian HIV pre**exposure prophylaxis intervention study across three states.

Ryan KE, Roth NJ, Willcox J, Tee BK, Armishaw J, Chang CC, Fairley CK, Cundill P, Bell C, Forgan-Smith G, Donohue W, Calabretto H, Owen L, Ding A , Picket C, Gall J, Elliot S, Murphy DA, Mak A, Price B, Lal L, Cornelisse V, Asselin J, Vujovic O, Nguyen L, Locke P, Ruth S, Batrouney C, de Wit J, Lockwood JT, El-Hayek C, Stoove M, Wesselingh S, Hoy JF, Grant RM, Wright EJ









CSRH









### South Australia, Tasmania, Victoria



Source: www.abs.gov.au















### HIV in South Australia, Tasmania, Victoria

	South Australia	Tasmania	Victoria
Population size	1,723,500	520,900	6,323,000



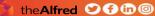














## HIV in South Australia, Tasmania, Victoria 2017

	South Australia	Tasmania	Victoria
Population size	1,723,500	520,900	6,323,000
Number diagnosed	45	11	310
Rate /100,000 pop	2.9	2.6	4.8
Exposure – male- male sex	22 (49%)	8 (73%)	201 (65%)
Exposure - heterosexual	10 (22%)	2 (18%)	63 (20%)
Aboriginal &/or Torres Strait Islander (ATSI)	5 (11%)	1 (9%)	2 (0.6%)

Source: www.abs.gov.au, Kirby Institute, HIV in Australia: Annual surveillance short report

















### PrEPX study design

- Population level intervention study Aimed to provide PrEP to participants prior to PrEP being listed on Australia's' Pharmaceutical Benefits Scheme
- Aimed to emulate real world PrEP conditions Participants attended GP and sexual health clinics for study visits Participants collected study drug from retail pharmacies Participants paid PBS equivalent price for each 3 month of study drug
- Participants attended study visits every three months HIV and STI test, urine biochemistry Provided three month prescription for study drug

















- HIV negative
- Aged 18 and over
- Adequate eGFR
- Report behaviours in line with national PrEP prescribing guidelines <sup>1</sup> Gay, bisexual, and other men who have sex with men (GBM)
  - Condomless sex with HIV positive regular partner, not on treatment
  - Condomless anal sex with partner of unknown or negative status
  - Ever used methamphetamine
  - Ever diagnoses with bacterial STI (syphilis, gonorrhoea, chlamydia)

#### Injecting drug use

Shared needles or equipment with GBM, person living with HIV (PLWHIV), insufficient access to safe equipment

Enrolment at clinicians discretion

People who do not report any of the above risk factors considered and evaluated on a caseby-case basis

1. E Wright et. al. 2017 Journal of virus eradication

















#### **Methods**

- Enrolment data completed by enrolling physician at baseline appointment Includes
  - Demographics (age, country of birth, ATSI)
  - Reason for enrolling
  - Previous PrEP and PEP use
- Enrolment data extracted across three states

Victoria - July 2016 - June 2017

South Australia: May 2017 - April 2018 Tasmania: August 2017 - April 2018

Describe enrolment characteristics across the three states Assess differences using Chi squared analysis for categorical variables









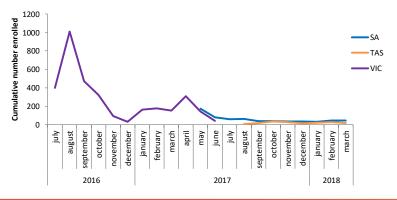






#### **PrePX enrolment**

	South Australia	Tasmania	Victoria	р
Number study spaces	500	100	2600	
Number enrolled	656	182	3323	













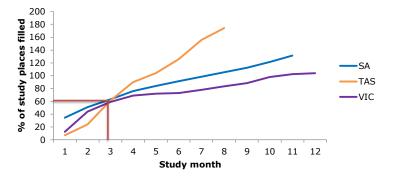






#### **PrePX enrolment**

	South Australia	Tasmania	Victoria	р
Number study spaces	500	100	2600	
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## **PrePX participant characteristics**

	South Australia	Tasmania	Victoria	р
Number study spaces	500	100	2600	
Number enrolled	656	182	3323	
Male	649 (98.9)	181 (99.5)	3299 (99.3)	
Trans or gender diverse	5 (0.8)	0 (0.0)	38 (1.1)	
Age (median, IQR)	34 (27-46)	36 (29-46)	34 (29-42)	
ATSI	17 (2.6)	12 (6.6)	Not recorded	0.02

















## **PrePX participant characteristics**

	South Australia	Tasmania	Victoria	р
Number enrolled	656	182	3323	
Sexuality				
• Gay	565 (86.1)	161 (88.5)	3128 (94.1)	
Bisexual	77 (11.7)	19 (10.4)	153 (4.6)	
Hetero/other	14 (2.1)	2 (1.1)	42 (1.3)	< 0.01
Previous PrEP use	83 (12.7)	53 (29.1)	835 (25.1)	< 0.01
Previous PEP use	253 (38.6)	42 (23.1)	1327 (39.9)	< 0.01















## **PrEPX participant characteristics**

	South Australia	Tasmania	Victoria	р
Number enrolled	656	182	3323	
HIV positive regular partner not on treatment, condomless sex	18 (2.7)	6 (3.3)	143 (4.3)	0.16
Condomless anal sex insertive/receptive	496 (75.6)	143 (78.6)	2360 (71.0)	<0.01
STI diagnosis	101 (15.4)	30 (16.5)	538 (16.2)	0.9
Used methamphetamine	73 (11.1)	8 (4.4)	452 (13.6)	<0.01
Shared needles or equipment with GBM, PLWHIV	25 (3.8)	4 (2.2)	168 (5.1)	0.1
Clinicians discretion	160 (24.4)	36 (19.8)	1061 (31.9)	< 0.01

\* Not mutually exclusive

















### **Summary of findings**

- Rapid enrolment (relative to study size) across all three states
- All states expanded study to meet demand
- Almost all participants male, reporting sex with men as risk of HIV transmission
- Under representation of other HIV priority populations (women, people who inject drugs, people from high prevalence countries)

Future work needed to explore

- Methods to engage other priority populations
- Transition to PBS listed PrEP
- Impact of PrEPX on population level HIV incidence

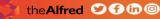














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