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SEXUAL HEALTH

Inequities in PrEP use according to Medicare status in a publicly funded sexual health clinic; a retrospective analysis

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ABSTRACT

New HIV diagnoses continue to disproportionately affect overseas-born men who have sex with men (MSM). A retrospective study of all pre-exposure prophylaxis (PrEP)-eligible MSM attending Sydney Sexual Health Centre for the first time in 2021 analysed self-reported PrEP-use, PrEP prescribed at the initial consult, and PrEP taken during 2021 using binomial logistic regression models. A total of 1367 clients were included in the analysis, 716 (52.4%) were born overseas and 414 (57.8%) were Medicare-ineligible. Medicare-ineligible clients were less likely to be on PrEP at initial visit (OR 0.45, 95% CI 0.26–0.77). This study suggests inequities in PrEP access and/or awareness in Medicare-ineligible MSM in Australia.

Keywords: HIV/AIDS, HIV prevention, pre-exposure prophylaxis, primary care, public health.

Introduction

HIV notification rates are declining among Australian-born men who have sex with men (MSM).[1] This is in comparison to increasing notification rates in overseas-born (OSB) MSM from Asia and the Americas, a number of whom acquire HIV post-migration.[2,3]

HIV pre-exposure prophylaxis (PrEP) is a highly effective biomedical HIV prevention method, and uptake in New South Wales has been good; in a 2021 cross-sectional survey, 60.7% of eligible MSM in Sydney reported using PrEP.[4] Since 2018, PrEP has been available via Medicare; Australia's subsidised healthcare system. Medicare status affects HIV PrEP access;[5] Medicare-ineligibility has been independently associated with willingness to use but not using PrEP, and Asian-born individuals were overrepresented in this group. PrEP prescribing data are not routinely collected for Medicare-ineligible people, hence estimates of use in this population are incomplete.

Sydney Sexual Health Centre (SSHC) is a publicly-funded sexual health service, where all clients can access free clinical consultations and pathology testing. The centre prioritises culturally and linguistically diverse people, MSM, sex workers, trans and gender diverse people, people living with blood-borne viruses, and all people with symptoms suggestive of sexually transmissible infections (STI).

Medicare-ineligible clients can receive a private PrEP prescription to purchase at community pharmacies or online; the online cost is comparable to a standard Medicare prescription. This study examines PrEP use according to Medicare status in a population of MSM attending SSHC in 2021.

Methods

Routinely collected data from the SSHC electronic medical record (EMR) between 1 January and 31 December 2021 were analysed retrospectively. Clients eligible for PrEP and attending SSHC for the first time were included for analysis. PrEP eligibility was defined as HIV-negative men and transgender women who have sex with men and report <100% condom use for anal sex with any partner. Data extracted included: self-reported PrEP use; PrEP prescribed at the visit; HIV test results; sexual behaviour and demographic

Table 1. Results table.

Part A: Odds of being on PrEP according to Medicare status						
Response	**Covariate**	**Comparison**	**OR**	**Test statistic**	***P*-value**	**Adjusted *P*-value**
Currently on PrEP at initial consultation ($n = 1367$)	Age at visit date	Na	1.01 (0.99, 1.03)			
	Number of male sex partners ≤12 months	Na	1.01 (1.01, 1.02)			
	Condom use	<50% vs none	1.9 (1.25, 2.94)			
		>50% vs none	0.81 (0.49, 1.35)			
	Country of birth	Other vs Australia	1.13 (0.74, 1.71)			
	STI diagnosed at consult	No vs yes	0.2 (0.14, 0.29)			
	Occupation	Other vs employed	0.45 (0.21, 0.9)			
		Student vs employed	0.81 (0.47, 1.37)			
	Medicare	No vs yes	0.45 (0.26, 0.77)	8.33	0.004	0.012
PrEP prescribed at initial consultation ($n = 1367$)	Age at visit date	Na	0.99 (0.97, 1.01)			
	Number of male sex partners ≤12 months	Na	1 (1, 1.01)			
	Condom use	<50% vs none	1.06 (0.69, 1.66)			
		>50% vs none	1.17 (0.75, 1.85)			
	Country of birth	Other vs Australia	1.21 (0.77, 1.87)			
	STI diagnosed at consult	No vs yes	0.39 (0.28, 0.56)			
	Occupation	Other vs employed	1.09 (0.58, 1.93)			
		Student vs employed	0.88 (0.54, 1.4)			
	Medicare	No vs yes	0.89 (0.54, 1.46)	0.22	0.638	0.638
Remain on PrEP at follow up ($n = 101$)	Age at visit date	Na	0.98 (0.91, 1.06)			
	Number of male sex partners ≤12 months	Na	1 (0.96, 1.05)			
	Condom use	<50% vs none	0.46 (0.08, 2.1)			
		>50% vs none	0.32 (0.06, 1.41)			
	Country of birth	Other vs Australia	1.14 (0.23, 6.42)			
	STI diagnosed at consult	No vs yes	3.26 (1.09, 10.88)			
	Occupation	Other vs employed	0.73 (0.13, 5.9)			
		Student vs employed	0.46 (0.13, 1.6)			
	Medicare	No vs yes	0.22 (0.04, 0.87)	4.73	0.03	0.059

Part B: Number of clients diagnosed with HIV at first clinic visit by country of birth	
Colombia	2
Vietnam	1
India	1
Thailand	1
Korea	1
Hungary	1
Australia	3
New Zealand	1

Conditional odds ratios with 95% confidence intervals for each covariate and associated comparison, after running separate logistic regressions for each response outcome. Likelihood ratio test statistics, as well as *P*-values and Holm adjusted *P*-values (to account for multiple hypothesis testing) are provided to assess the evidence for an association between Medicare and PrEP status.
Na, not applicable.

variables. The EMR was manually reviewed for documentation of subsequent PrEP use in these clients; prescribed PrEP at consult or documented on PrEP (mandatory self-reported field) at subsequent 2021 visits.

Binomial logistic regression models were fit to test for an association between Medicare and being prescribed, currently on PrEP at initial visit, or on PrEP at any time in 2021. Covariates were included to adjust for confounding factors; age, number of sexual partners in the past 12 months, condom use, STI diagnosis, occupation, country of birth.

South Eastern Sydney LHD Research Office (application 2023/ETH00053) deemed this a Quality Assurance project not requiring further ethical review.

Results

A total of 1367 clients were eligible for analysis. Of that number, 716 (52.4%) were born overseas, of whom: 372 (52.0%) had resided in Australia for fewer than 5 years; 414 (57.8%) were Medicare-ineligible; and 319 (44.6%) did not list English as a preferred language. At their first visit to SSHC, 1220 (89.3%) were not taking PrEP, and 146 (10.7%) were prescribed PrEP.

After accounting for demographics and behavioural risk, Medicare-ineligible clients had reduced odds of being on PrEP at the time of initial consult compared with Medicare-eligible (OR 0.45, 95% CI 0.26–0.77), this was despite the majority (334, 80.7%), having been in Australia for more than 1 year (mean duration 4.8 years, median 3 years, IQR 2–5 years). Of all the clients prescribed PrEP at their initial visit, the majority (101, 69%; 72% of Medicare-ineligible, 67% of Medicare-eligible) attended a repeat visit within 12 months; Medicare-ineligible clients had reduced odds of being on PrEP at follow up (OR 0.22, 95% CI 0.04–0.87) (Table 1).

A total of 11 (11/1367, 0.01%) clients, all cisgender MSM, were diagnosed with HIV at initial consult. The majority (7/11, 63.6%) were born overseas, Medicare-ineligible and had been in Australia for fewer than 5 years.

Discussion

This study demonstrates that OSB, Medicare-ineligible MSM attending SSHC are significantly less likely to be taking PrEP compared with Medicare-eligible people, and that the majority of new HIV diagnoses were in OSB Medicare-ineligible MSM. This was a retrospective analysis of a large population of clients accessing an urban publicly-funded sexual health service in Australia; and while it cannot represent all settings and health services, it provides valuable information about a population of clients who are underrepresented in both research and surveillance data and demonstrates inequities in PrEP-access associated with Medicare eligibility. Other studies have demonstrated that PrEP access among international migrant populations may be improved through public funding, multilingual knowledge provision and navigational assistance to HIV prevention services.[6–8] Strategies that improve PrEP access for OSB Medicare-ineligible MSM through publicly funded sexual health services should be explored.

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Data availability. The data that support this study cannot be publicly shared due to ethical or privacy reasons and may be shared upon reasonable request to the corresponding author if appropriate.

Conflicts of interest. The authors declare no conflicts of interest.

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