

Increasing prevention coverage among Australian gay and bisexual men but elevated HIV risk among younger and bisexual men: analysis of national behavioural surveillance data 2017–21

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Background

Gay and bisexual men (GBM) in Australia increasingly use biomedical HIV prevention methods. Rising 'net prevention coverage' (the use of any effective strategy e.g. condoms, PrEP or undetectable viral load, UVL) is associated with declining HIV infections. However, disparities in prevention coverage are believed to exist. We analysed variations in prevention coverage to identify opportunities for intervention.

Methods

Behavioural surveillance data were collected during 2017–21 from gay venues, events and online in seven states/territories. Trends in net prevention coverage and HIV risk (condomless anal sex with casual partners unprotected by PrEP or UVL) were assessed with logistic regression, stratifying by age, country of birth, sexual orientation, and the proportion of gay residents in participants' residential suburbs.

Results

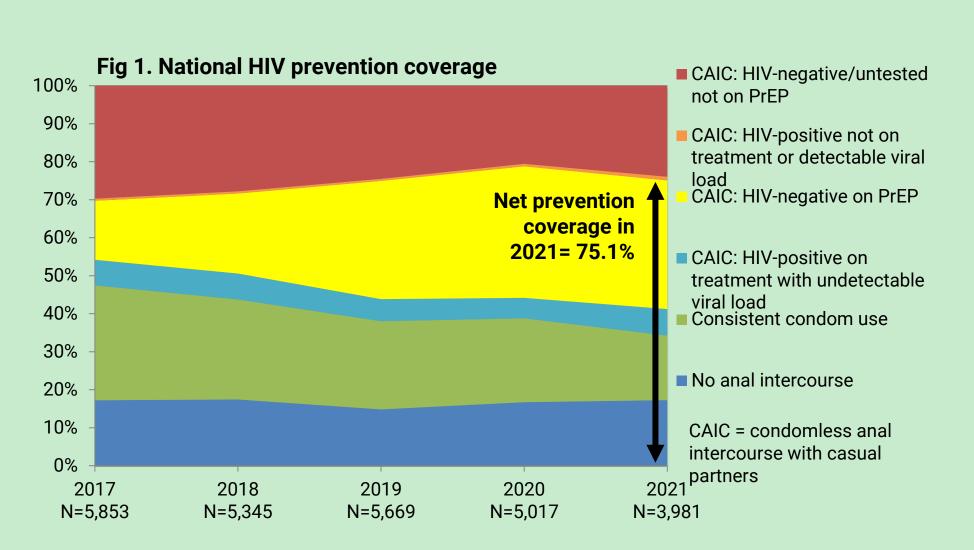
25,865 survey responses from participants with casual male partners were included. The mean age was 37.6 years, 69.8% were Australianborn, 88.2% gay-identified, and 9.7% living with HIV.

Prevention coverage by suburb

During 2017-21, net prevention coverage increased more in suburbs with \ge 10% gay residents (73.4% to 88.3%, p<.001) and less in suburbs with <10% gay residents (68.9% to 73.7%, p<.001).

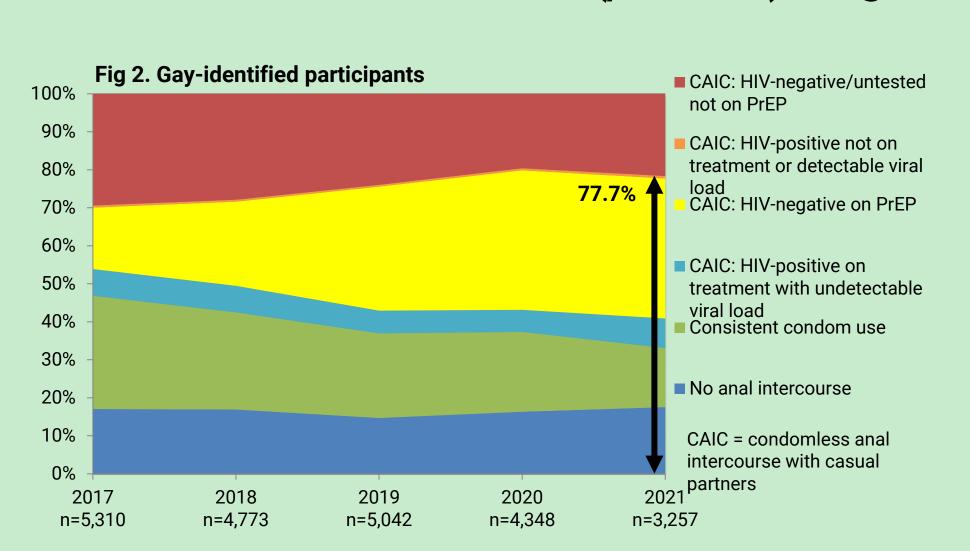
National HIV prevention coverage

Nationally, net prevention coverage increased from 69.8% in 2017 to 75.1% in 2021 (p<.001), and HIV risk declined from 30.2% to 24.9% (p<.001), influenced by rising PrEP use (15.6% to 33.9%, p<.001). See Fig 1.

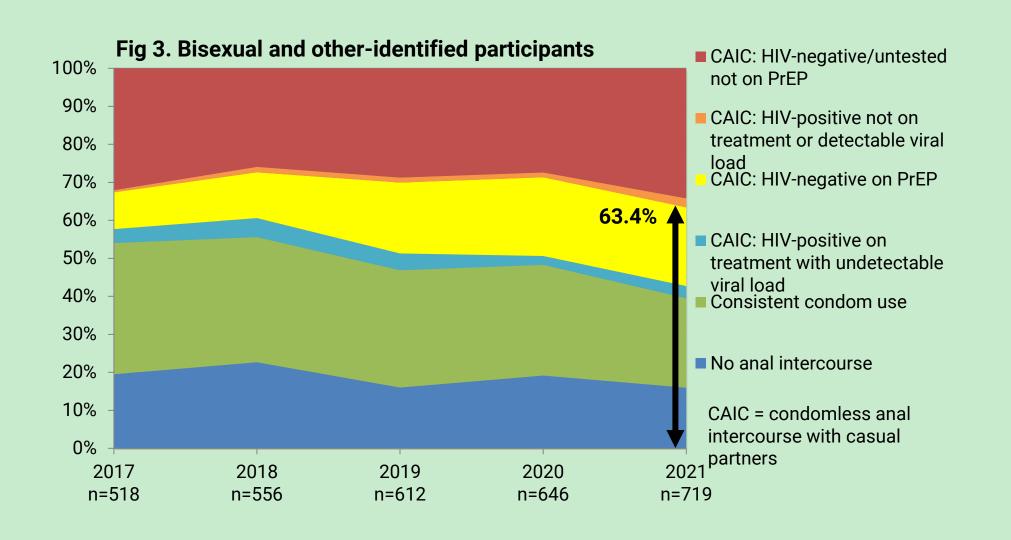


Sexual orientation

Prevention coverage (& PrEP use) was higher among gay men than other participants, increasing from 70.1% in 2017 to 77.7% in 2021 (*p*<.001). Fig 2.

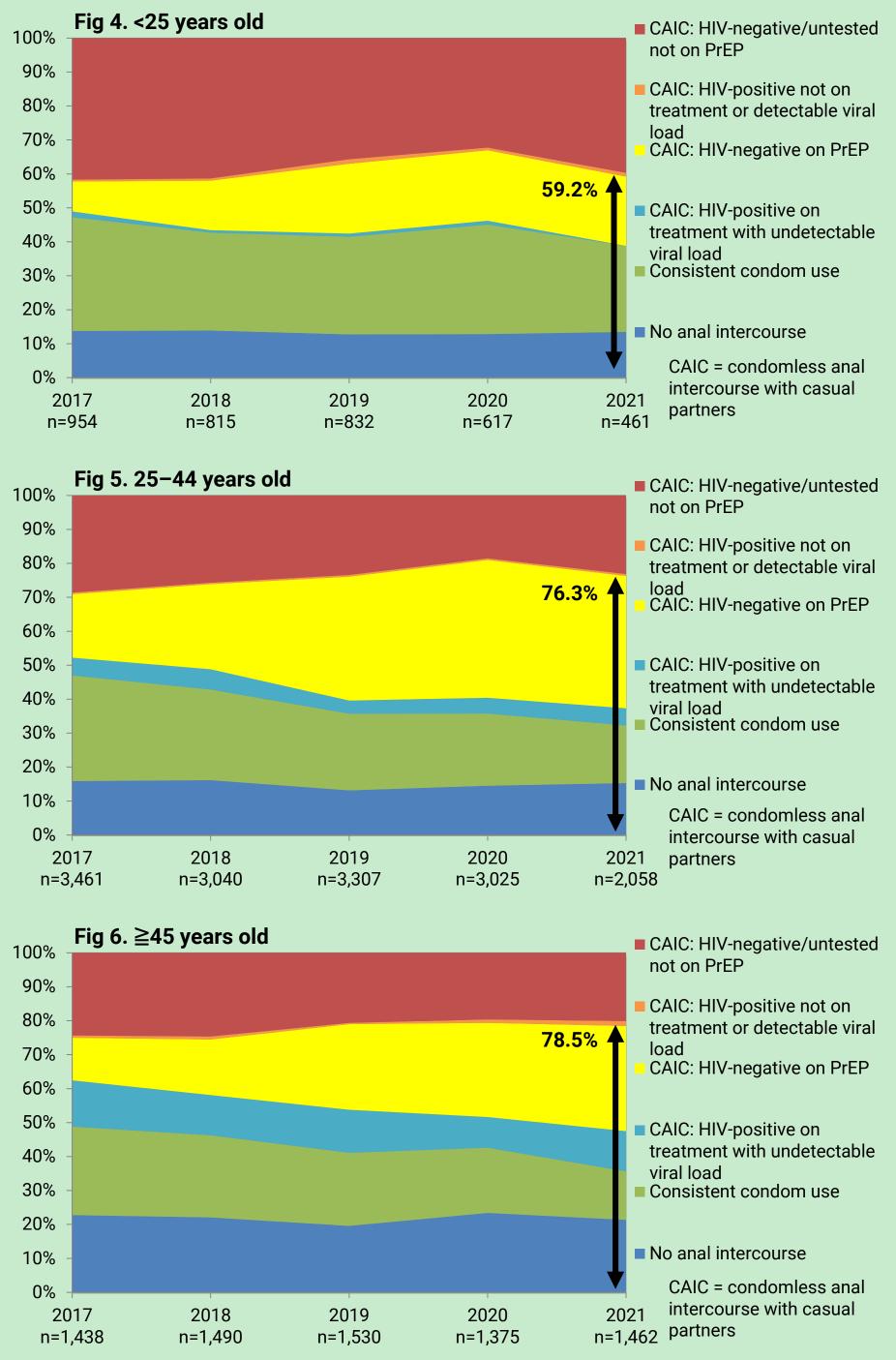


Bisexual and other-identified participants were more likely to rely on condoms than PrEP. Prevention coverage fell in this group from 67.4% in 2017 to 63.4% in 2021 (*p*<.001). See Fig 3.



Age

Participants aged <25 years were the most likely to consistently use condoms (33.5% in 2017 to 25.4% in 2021, p=.02), but also reported the highest levels of HIV risk (42.2% in 2017 to 40.8% in 2021, p=.01). 25-44-year-olds were the most likely to use PrEP (18.7% to 39.0%, p<.001) and \ge 45-year-olds the most likely to use/report UVL (13.6% to 11.8%, p=.02). See Figs 4-6.



Conclusion

Recent increases in HIV prevention coverage in Australia are concentrated among older GBM and suburbs with more gay residents. Younger men and bisexual men remain more at risk of HIV, more reliant on condoms, and less likely to use PrEP or UVL. Encouraging greater prevention coverage in these groups is necessary to further reduce HIV risk in Australia.



