

Should Australia consider opt-out HIV testing?

Stacy Leidel¹, Ruth McConigley¹, Duncan Boldy¹, Sonya Girdler², Sally Wilson¹

1. School of Nursing & Midwifery, Curtin University, Perth, WA, Australia

2. School of Occupational Therapy & Social Work, Curtin University, Perth, WA, Australia

EDITORIAL

Please cite this paper as: Leidel S, McConigley R, Boldy D, Girdler S, Wilson S. Should Australia consider opt-out HIV testing? AMJ 2015;8(1):30–32. <http://dx.doi.org/10.4066/AMJ.2015.2290>

Corresponding Author:

Stacy Leidel
GPO Box U1987
Perth WA 6845
Australia
Email: stacy.leidel@student.curtin.edu.au

In 2012 and 2013, Australia had the highest incidence of HIV diagnoses in 20 years.¹ While there is no imminent threat of a generalised epidemic in Australia, the recent increase in HIV diagnoses reflects changing infection patterns that warrant an exploration of current testing practices. Opt-out HIV testing could decrease the number of undiagnosed infections and provide for timely connection to care.

Opt-out testing is a method for detecting disease in which patients are informed that they will be tested for the disease unless they decline. In opt-out HIV testing, patients in the general population between the ages of 13 and 64 years are tested for HIV at least once in their lifetime in a routine health encounter, such as at a GP consultation or emergency department visit.² Separate written consent and HIV prevention counselling would not be compulsory. Opt-out testing is done without a formal HIV risk assessment (such as number of sexual partners, history of sexually transmitted infections (STIs), or injecting drug use).² It may be a part of, or separate from, STI testing. High-risk groups such as men who have sex with men (MSM) or injecting drug users (IDU) would test more frequently as per current guidelines, and pregnant women would continue to be tested on a routine basis.

Decreasing the number of undiagnosed HIV infections is one of the objectives of Australia's Seventh National HIV Strategy.³ According to national surveillance data, up to 25 per cent of HIV infections in Australia remain undiagnosed.¹ HIV-positive individuals who are unaware of their status often have an elevated viral load, and are consequently more infectious than HIV-positive individuals who are virologically suppressed with medication. Undiagnosed people transmit up to 31 per cent of new HIV infections.¹ Morbidity and mortality decrease markedly if patients are linked to HIV treatment early in the course of their infection. Opt-out testing would increase the number of individuals tested for HIV, which could reduce the number of undiagnosed infections and prevent future transmissions.

Research suggests that people are less likely to test for stigmatised diseases like HIV, because it could imply that they have engaged in atypical or even immoral behaviour.⁴ Opt-out testing does not target individuals or their behaviours, making it similar to testing for non-stigmatised diseases such as diabetes. A normalised, morally neutral approach could increase HIV testing rates, reducing late diagnosis.

Late HIV diagnosis (defined as a CD₄ count of less than 350 at diagnosis) remains a significant challenge in Australia, comprising 29.6 per cent of new diagnoses in 2013.¹ Between 2008 and 2012, 50 per cent of heterosexually-transmitted HIV infections were diagnosed late, probably as a result of less frequent testing among heterosexuals.¹ French and American studies have shown opt-out HIV testing in the general population reduces the time between infection with the virus and diagnosis. Further, the CD₄ count at diagnosis is higher.^{2,5} Though Australian HIV patterns and prevalence are different from France and the United States (US), it is plausible that adopting opt-out testing in Australian health settings (such as general practice or emergency departments) could potentiate earlier diagnosis and connection to care.

Opt-out HIV testing could pick up infections in people who do not present for testing or who do not consider themselves to be at risk. It would be particularly beneficial for heterosexuals. While HIV transmission in Australia is most common among high-risk groups such as MSM and IDU, heterosexual transmission of HIV has increased by 29 per cent between 2003 and 2012, from 203 new infections in 2003 to 313 in 2013.¹

Testing that occurs outside of dedicated HIV testing centres can capture a broader section of the population, including those who test infrequently or perceive themselves as low risk. A range of testing settings is necessary because even sexual health services do not identify all HIV infections. A study conducted in Canberra in 2006 found that 58 per cent of HIV-infected people had attended a sexual health clinic prior to the consultation that led to their diagnosis. In the same study, 95 per cent of patients had presented with risk factors that warranted HIV testing, but testing did not occur until later.⁶

Societal factors such as Australia's resource boom have resulted in increased mobility and disposable income. It is not unusual for Australians to live for extended periods in countries with higher HIV prevalence. There has been an increase in heterosexual HIV transmission among male fly-in, fly-out workers from Western Australia and Northern Territory who travel frequently to Thailand and Indonesia.¹ Cultural and social factors identified by Brown⁷ make it unlikely that this group would self-select for HIV testing. Any infections in this group could be identified earlier by conducting opt-out HIV testing in places where they are most likely to seek general medical care (such as occupational health, general practice, or emergency departments).

Cost-effectiveness modelling would be required before opt-out HIV testing could be implemented throughout Australia. Cost effectiveness varies with disease prevalence, which for HIV is presently 0.15 per cent among Australians over age 15.¹ Research from the US has shown that opt-out testing is cost effective even at 0.05 per cent prevalence.⁸ A French study found that one-time, routine HIV testing in the general population was similar in cost effectiveness to other screening programs such as annual chlamydia testing in young adults.⁵ These findings may not be generalisable to Australia because of differences in health systems and disease patterns, but modelling showed that opt-out testing among Australian pregnant women is cost effective at prevalence rates greater than 0.004 per cent.⁹

As with any diagnostic investigation, an opt-out HIV testing program must ensure compliance with state and national laws, informed consent, and patient confidentiality procedures. Health providers should perform and document thorough pre- and post-test counselling and facilitate immediate referrals to HIV treatment centres in case of positive results. Since opt-out HIV testing is performed without clinical suspicion or risk factor assessment, HIV diagnoses with this approach (though infrequent) would likely be unanticipated.¹³ Consequently, opt-out testing protocols must mitigate the potential effects of diagnostic labelling (such as stigmatisation) and address the mental health consequences of the testing or results (such as self-harm or harm to an individual believed to have transmitted the infection).^{10,11,13} Psychosocial support for newly diagnosed individuals is essential for self-management and engagement with treatment.¹² An opt-out testing program should use HIV tests with a high specificity to minimise false positives, which are more common in populations with lower disease prevalence.

In opt-out HIV testing, the onus is on the patient to decline the test. Research from the US and UK has shown that most patients are willing to be tested.¹⁴ However, it is essential that there is no coercion or negative consequence for patients who do not wish to test.^{10–13}

Opt-out testing in the US was facilitated by Centers for Disease Control funding for dedicated staff to perform testing and counselling. Australia may have other priorities for scarce healthcare resources. We are conducting a two-phase feasibility study of opt-out HIV testing in GP practices. Preliminary findings suggest that healthcare providers see public health benefits to opt-out HIV testing, but are concerned about the increased workload and potential for pre-test counselling to be overlooked.

The Seventh National HIV Strategy aims to sustain Australia's low prevalence of HIV, but its emphasis on targeted, risk factor-based testing should be reconsidered. International and preliminary Australian evidence indicates that opt-out HIV testing is acceptable and cost effective. Given the recent increase in HIV diagnoses in Australia, this is an opportune time to explore the feasibility of opt-out HIV testing to improve early diagnosis and connection to care in non-traditional populations.

References

1. The Kirby Institute-University of New South Wales. Annual Surveillance Report 2014 HIV Supplement. 2014 [cited 2014 Sept 1]. Available from: http://kirby.unsw.edu.au/sites/default/files/hiv/resources/HIVASRSuppl2014_online.pdf.
2. Branson BM, Hansfield HH, Lampe MA, Janssen RS, Taylor AW, Lyss SB, et al. Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health-care settings. *MMWR Recomm Rep*. 2006;55 (RR14):1–17.
3. Australian Government Department of Health and Ageing. Seventh National HIV Strategy 2014–2017. 2014 [cited 2014 Sept 5]. Available from: [http://www.health.gov.au/internet/main/publishing.nsf/Content/8E87E65EEF535B02CA257BF0001A4EB6/\\$File/HIV-Strategy2014-v3.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/8E87E65EEF535B02CA257BF0001A4EB6/$File/HIV-Strategy2014-v3.pdf).
4. Young SD, Monin B, Owens D. Opt-out testing for stigmatized diseases: a social psychological approach to understanding the potential effect of recommendations for routine HIV testing. *Health Psychol*. 2009;28(6):675–81. DOI:10.1037/a0016395.
5. Yazdanpanah Y, Sloan CE, Charlois-Ou C, Vu SL, Semaille C, Costagliola D, et al. Routine HIV screening in France: clinical impact and cost-effectiveness. *PLoS One*. 2010; 5(10). DOI:10.1371/journal.pone.0013132.
6. McDonald EA, Currie MJ, Bowden FJ. Delayed diagnosis of HIV: missed opportunities and triggers for testing in the Australian Capital Territory. *Sex Health*. 2006;3(4):291–5. DOI:10.1071/SH06022.
7. Brown G, Ellard J, Mooney Somers J, Hildebrand J, Langdon T. HIV risk among Australian men travelling overseas: networks and context matter. *Cult Health Sex*. 2012;14(6):677–90. DOI:10.1080/13691058.2012.678015.
8. Sanders GD, Anaya HD, Asch S, Hoang T, Golden JF, Bayoumi AM, et al. Cost-effectiveness of strategies to improve HIV testing and receipt of results: economic analysis of a randomized controlled trial. *J Gen Intern Med*. 2010;25(6):556–3. DOI:10.1007/s11606-010-1265-5.
9. Graves N, Walker DG, McDonald AM, Kaldor JM, Ziegler JB. Would universal antenatal screening for HIV infection be cost-effective in a setting of very low prevalence? Modelling the data for Australia. *J Infect Dis*. 2004; 190(1):166–74. DOI:10.1086/421247.
10. Hanssens C. Legal and ethical implications of opt-out HIV testing. *Clin Infect Dis*. 2007;45 Suppl 4:S232–9. DOI:10.1086/522543.
11. World Health Organization. Service delivery approaches to HIV testing and counselling (HTC): a strategic policy framework. Geneva; 2012 [cited 2014 Sept 2]. Available from: http://www.who.int/hiv/pub/vct/htc_framework/en/
12. Gostin LO. HIV screening in health care settings: Public health and civil liberties in conflict? *JAMA*. 2006;296(16):2023–5.
13. Galletly CL, Pinkerton SD, Petroll AE. CDC recommendations for opt-out testing and reactions to unanticipated HIV diagnoses. *AIDS Patient Care & STDs*. 2008;22(3):189–93.
14. Rayment M, Thornton A, Mandalia S, Elam G, Atkins M, Jones R, et al. HIV testing in non-traditional settings—the HINTS study: a multi-centre observational study of feasibility and acceptability. *PLoS One*. 2012;7(6):1. DOI:10.1371/journal.pone.0039530.

PEER REVIEW

Peer reviewed.

CONFLICTS OF INTEREST

The authors declare that they have no competing interests.