Improved antenatal HIV screening coverage with a switch from opt-in to opt-out testing in the northern region of New Zealand

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A universal offer of antenatal screening for HIV was introduced in New Zealand by the Ministry of Health in 2006. Since then, HIV infection has been diagnosed in 32 women through antenatal screening, and no cases of vertical (mother to child) transmission of HIV have been recorded. Antenatal HIV screening, together with a low prevalence of infection among heterosexual individuals, an immigration policy that requires HIV screening for most long-term migrants and effective anti-retroviral therapy have likely contributed to this success. Despite the universal offer of antenatal HIV screening, the specifics of whether to offer HIV testing as an opt-in versus an opt-out test was left to regional health authorities. The northern region of New Zealand (Auckland and Northland regions) adopted an opt-in approach.

Differences in opt-in versus opt-out testing are described in Table 1. An opt-in approach requires clinicians to be proactive in offering a test, and for the clinician and patient to correctly balance the pros and cons of accepting it, aggravating potential barriers to screening. Opt-in testing also unduly focusses on HIV, which is only one of a bundle of blood tests performed at the first antenatal visit (the bundle also includes full blood count, blood group and antibodies, hepatitis B, rubella, syphilis and diabetes), instead of normalising HIV screening across healthcare. Recent research has found that heterosexual Māori individuals are more likely to be diagnosed with advanced HIV disease compared with Europeans, emphasising the need to normalise testing for equitable outcomes.

Since 2006, evidence has mounted that opt-out testing is the most effective approach to antenatal HIV testing, and this has been widely recommended and adopted internationally. A 2017 systematic review described the opt-out strategy as lifting testing rates from a median of 59% to 88%. Improvements in medical therapy for HIV mean that early diagnosis and treatment confers similar life expectancy to that of the general population, additionally supporting a normalised approach to testing.

In 2022, preliminary data from the northern region indicated that <90% of women engaged in antenatal care were tested for HIV as part of their first antenatal bloods with the opt-in approach. With sub-optimal antenatal coverage, vertical

Table 1: Opt-in versus opt-out antenatal HIV testing.

<table>
<thead>
<tr>
<th>Opt-in</th>
<th>Opt-out</th>
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<tbody>
<tr>
<td>Pregnant women receive pre-HIV test counselling and are offered a test. They must agree to having an HIV test, usually verbally.</td>
<td>Pregnant women are informed that HIV testing is normally included in the standard group of antenatal tests and that they may opt to decline any of the tests.</td>
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<tr>
<td>HIV must be requested specifically/in addition to the standard first antenatal blood test bundle on the laboratory request form.</td>
<td>HIV testing is performed as part of the standard first antenatal blood test bundle unless the decision to decline testing is documented on the laboratory request form.</td>
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transmission of HIV is possible, and it also limits New Zealand's ability to meet its “95-95-95” targets of diagnosing, treating and virally suppressing people with HIV in order to eliminate local transmission of HIV by 2030. Therefore, stakeholders in the region such as governance groups, non-governmental organisations, public health, sexual health, infectious diseases, obstetrics, midwifery and primary care were consulted with a proposal that all of the northern region laboratories would add HIV Ag/Ab testing into the existing bundle of first antenatal blood tests with an associated update to laboratory paper and electronic request forms.

Feedback from the consultation was positive. Notably, many individuals and organisations were unaware that the opt-in model was used in New Zealand. The proposal was adopted on 1 September 2022 at Te Tai Tokerau, Te Toka Tumai, Waitematā, Counties Manukau hospital laboratories and the community laboratories Northland Pathology and Labtests, which together provide services for all 1.9 million residents of the northern region of New Zealand.

Community laboratory (Labtests, Northland Pathology) testing data (which reflects >95% of first antenatal tests performed in the region) illustrates that with the pre-intervention opt-in testing policy, 16,907 (87%) of 19,374 first antenatal bloods were tested for HIV between September 2021–August 2022 (Figure 1). With the change to opt-out testing, 18,272 (96%) of 18,945 first antenatal bloods were tested for HIV in the period September 2022–August 2023 (Figure 1). An increase in coverage was observed over the course of the first year of opt-out, up to 98% (4,641 of 4,732) in the last 3 months of the opt-out period.

This consultation and intervention demonstrated that there are still gaps to be closed in New Zealand’s antenatal screening for HIV. We have addressed one area, for women who already access antenatal screening, whereas a comprehensive program should ensure all women can access screening during pregnancy or at delivery. During the consultation it was apparent that practices surrounding HIV screening in pregnancy are not transparent to the community sector and policy makers and they may not reflect current best-practice; therefore, we strongly recommend national oversight of this area, starting with an audit of current antenatal HIV testing policy and uptake in all localities (including ethnicity data), and an unequivocal move to national opt-out testing.

Figure 1: Proportion of bundled first antenatal bloods with HIV Ag/Ab testing performed in the northern region community, September 2021–August 2023.
COMPETING INTERESTS
Nil.

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