

Will low HIV re-test rates threaten the MTCT elimination agenda?

Programmatic evidence from Zimbabwe

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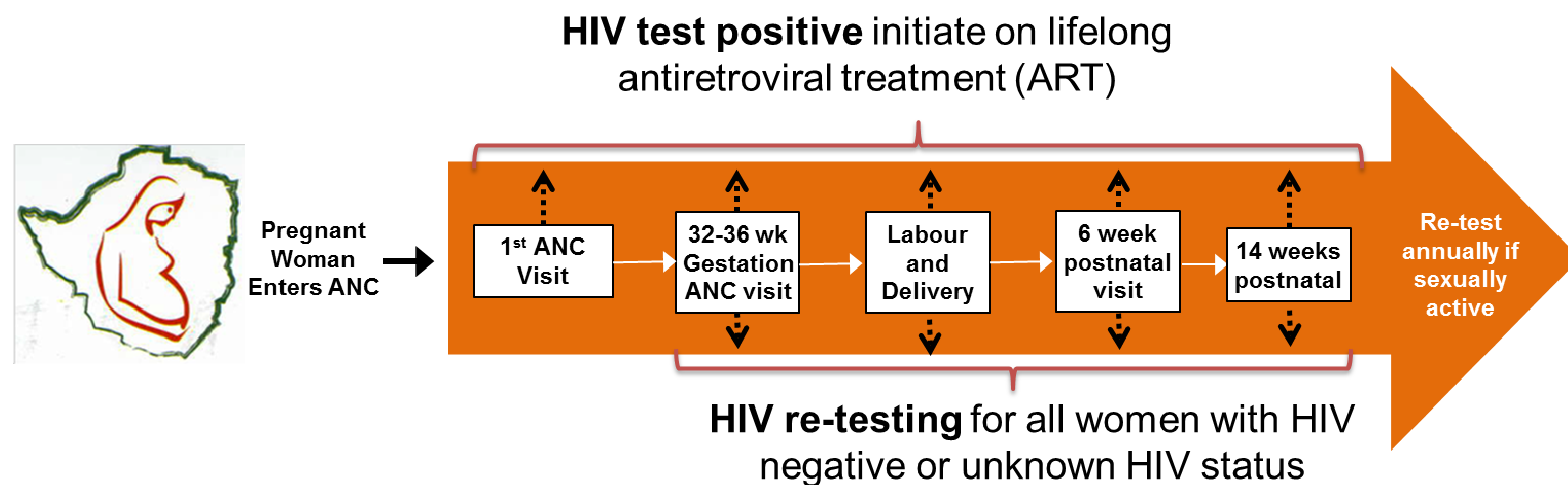
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BACKGROUND

- Zimbabwe has an HIV prevalence of 16.1% among women in antenatal care.¹
- HIV is the leading cause of maternal death in Zimbabwe.²
- Elimination of mother-to-child-transmission (MTCT) of HIV in Zimbabwe (< 5%) will require effective identification and enhanced interventions among groups of HIV positive women at high risk of MTCT.
- Incident HIV infection is estimated to be associated with 30% probability of MTCT; incident infections during breast feeding lead to a 28% probability of postnatal MTCT.³
- National guidance recommends re-testing all women without confirmed HIV status every 3 months during pregnancy and breastfeeding (Figure 1).
- The proportion of women who receive HIV re-testing services during pregnancy and breastfeeding is not routinely reported in Zimbabwe.

Figure 1. Recommended HIV re-testing among pregnant and breastfeeding women in Zimbabwe



OBJECTIVE

- To determine recorded rates of HIV re-testing in Zimbabwe's PMTCT program.

METHODS

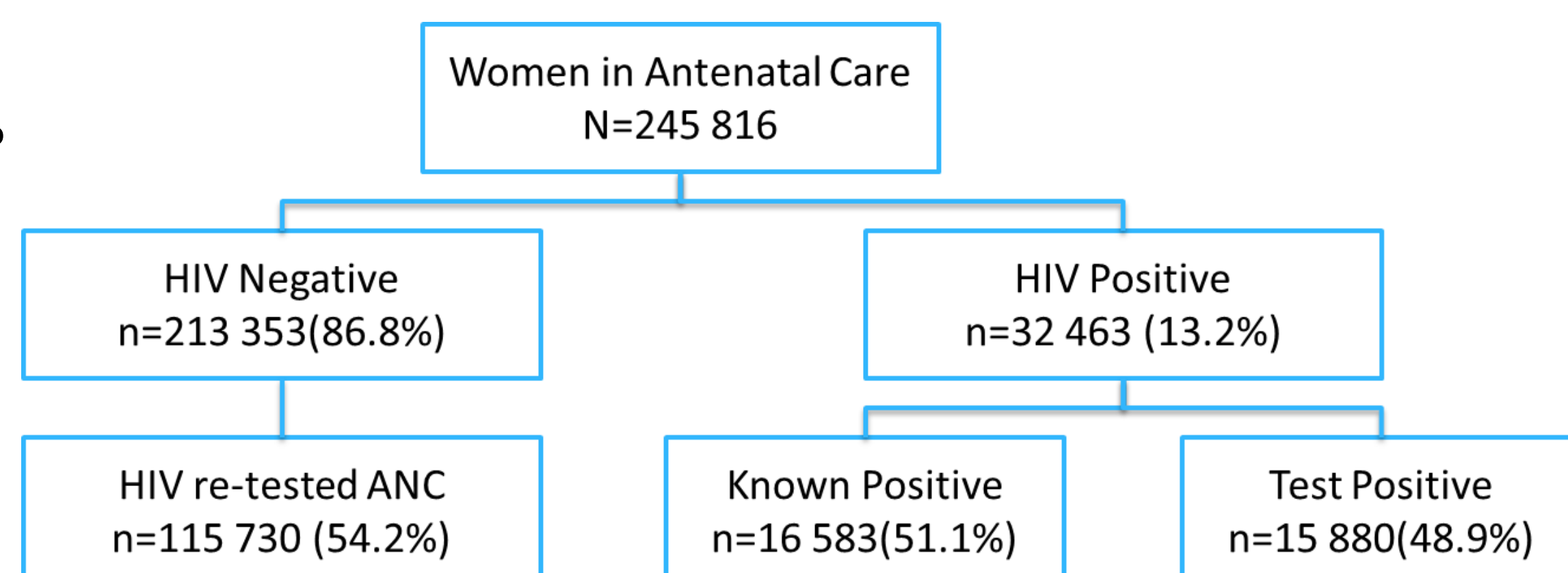
- We utilised routinely collected aggregate data from 824 health care facilities offering PMTCT services in 6 Provinces of Zimbabwe.
- We descriptively analysed program data from September 2014 to December 2015 to determine HIV re-test rates among women accessing services across the PMTCT cascade on HIV re-test rates at 3 specific time points:
 1. Antenatal Care (ANC)
 2. Labour and Delivery (L&D)
 3. Within 24 months post-delivery
- Chi square tests were used to determine significance of differences in proportion of women re-tested for HIV in different PMTCT care settings.

RESULTS

HIV testing and re-testing in ANC

- HIV prevalence of 13.2% (n=32,463 / 245,816) women recorded at first ANC.
- More women entered ANC with known HIV positive status (51.1%; n=16,583) than tested positive in ANC.
- A total of 115,730 HIV re-tests were recorded in ANC; 54.2% of expected based on number of HIV negative women recorded in ANC (Figure 2).
- Low HIV re-test rates in ANC are likely related to late gestational age at booking in Zimbabwe (avg. 22 weeks).

Figure 2. HIV test and re-test status in antenatal care

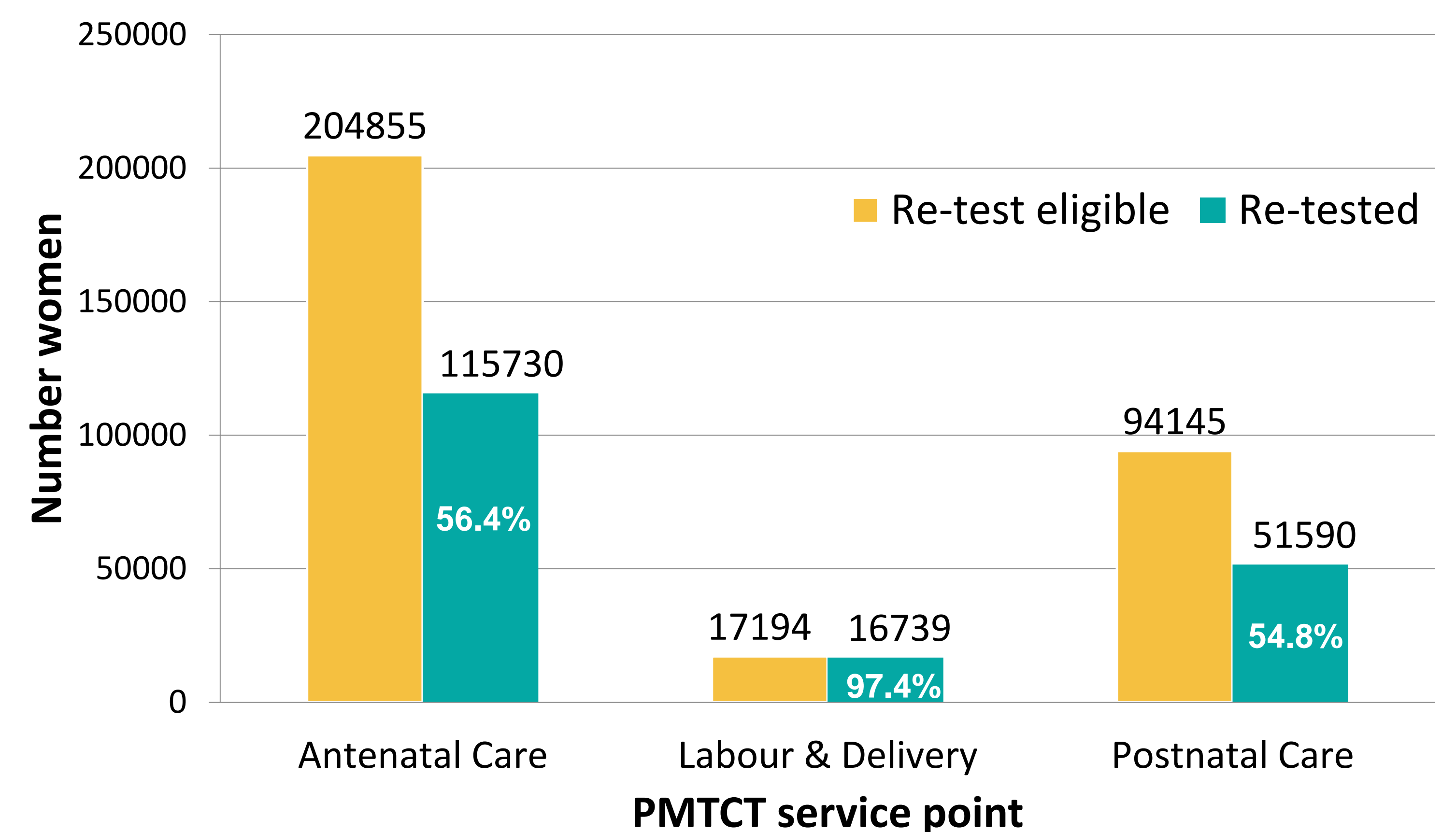


HIV re-testing Labour and Delivery

- Among 17,194 women documented as eligible for re-testing in L&D, 16,739 (97.4%) re-tests were recorded.
- Overall HIV prevalence was 2.2% among all those re-tested in L&D.
- HIV prevalence was high among women testing for the first time in L&D (>15%).⁴

RESULTS continued

Figure 3. HIV Re-test eligible vs. re-tested



HIV re-testing in postnatal care

- A smaller proportion of women identified as re-test eligible in PNC were re-tested (54.8%).
- A significantly greater proportion of those identified as re-test eligible received HIV re-testing in L&D as compared to PNC $\chi^2(1, N = 179,668) = 2265.55, p < 0.001$.

CONCLUSIONS

- We observed lower documented HIV re-test rates in antenatal and postnatal care settings than would be expected based on ANC enrolment.
- Our analysis is limited by the inability to report individual-level HIV re-test rates through use of routine, aggregate program data.
- Greater efforts are required to increase HIV re-test rates among pregnant and breastfeeding women to identify women with incident HIV infection at increased risk of vertical transmission.
- Implementation research is required to identify evidence-based strategies to increase early booking and routine HIV re-testing in antenatal and postnatal settings in Zimbabwe.

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