

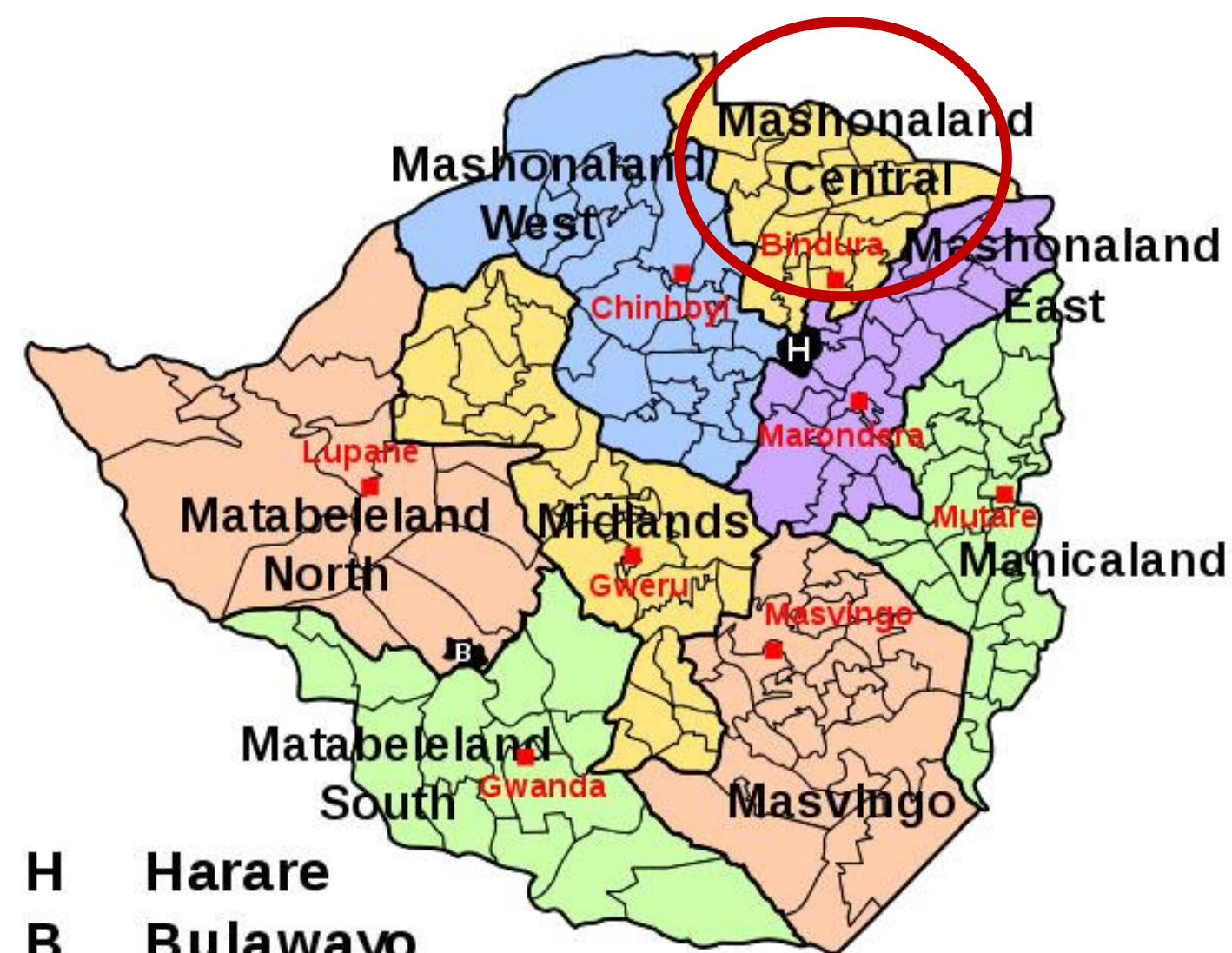
Impact of Option B+ on Maternal ART initiation rates in Mashonaland Central, Zimbabwe

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BACKGROUND

Zimbabwe Context:

- HIV prevalence in antenatal care (ANC) of 15.9%.¹
- 39% of pregnancy related deaths in Zimbabwe are attributed to HIV.²
- Mashonaland Central Province has among highest rates of maternal and infant mortality in Zimbabwe.³



Mashonaland Central, Zimbabwe

Option B+ in Zimbabwe:

- Option B+: all pregnant and breastfeeding women identified as HIV positive initiated on lifelong antiretroviral therapy (ART).
- Zimbabwe Ministry of Health and Child Care transition to Option B+ approach for PMTCT in September 2013.
- Option B+ presents an opportunity to improve maternal and child health through improved access to ART and reduced vertical HIV transmission in current and future pregnancies in Zimbabwe.

OBJECTIVE

- To document changes in ART initiation rates among HIV positive women in ANC following transition to Option B+ in Mashonaland Central Province.

METHODS

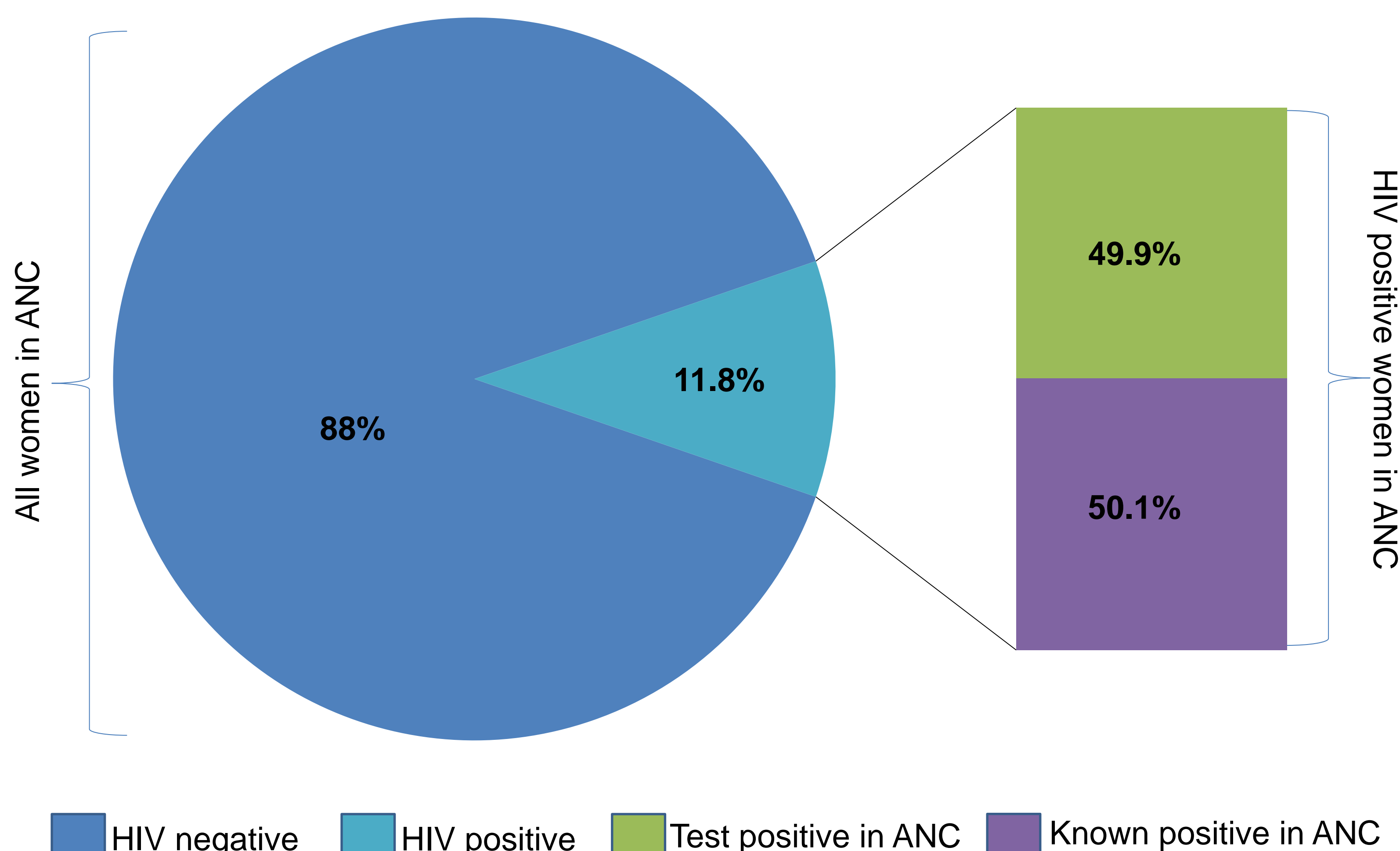
- In April 2014, Option B+ was rolled out simultaneously to all 135 health sites in Mashonaland Central Province, serving a population of 273 372 women of childbearing age.
- Routinely collected data from the national PMTCT program on maternal ART initiation rates was analysed descriptively 6 months prior and 9 months after roll out of Option B+ (Oct 2013-Dec 2014).
- Chi-square test was used to calculate statistical significance.

RESULTS

Population of women attending ANC

- Among 48 076 women attending ANC in Mashonaland Central from October 2013 to December 2014, 5 685 women (11.8%) were identified as HIV positive (95%CI: 11.5%-12.1%).
- Half of HIV positive women (50.1%) entered ANC with known HIV positive status (95% CI:48.8%-51.4%). (Figure 1)

Figure 1. HIV positive women in ANC, Mashonaland Central Province, Oct 2013 to Dec 2014

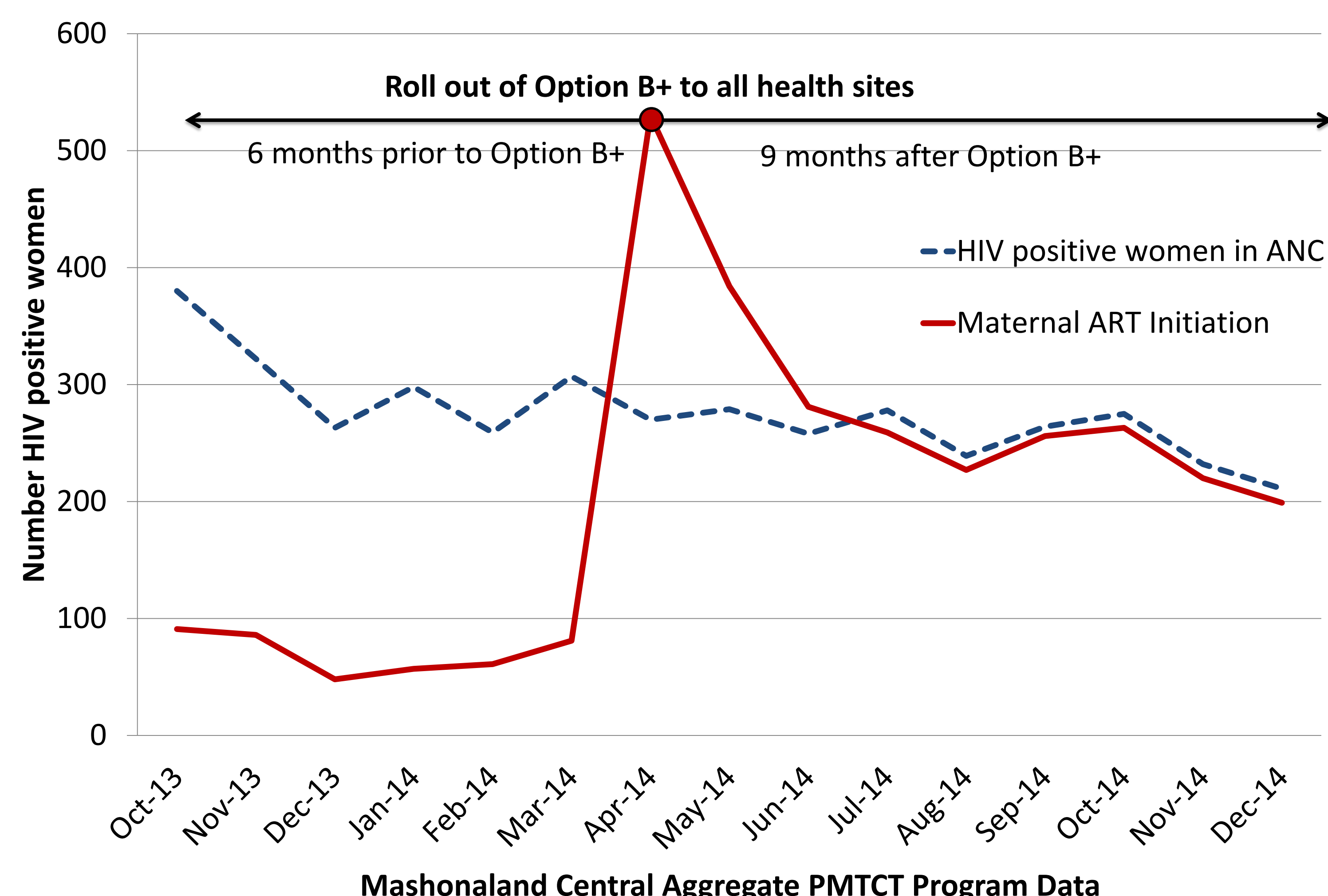


RESULTS continued

Maternal ART initiation

- In the 6 months prior to implementation of Option B+, 34% of women with known HIV positive status were not on ART entering ANC.
- The simultaneous, rapid roll out of Option B+ to all sites in Mashonaland Central resulted in 457% increase in the number of HIV positive pregnant women initiated on ART in ANC (Figure 2)

Figure 2. Number HIV positive women and infants initiated on ART (Oct 2013-Dec 2014), Mashonaland Central



- There was a highly significant difference in proportion of HIV positive women (known and tested positive) initiated on ART from 6 months prior to 6 months after implementation of B+, $\chi^2(1, N = 5300) = 2373.43, p < 0.001$.
- In the last quarter of 2014 (Oct-Dec), among 718 women identified in ANC as HIV positive, 95.0% (n= 682) were initiated on ART (95% CI: 93.1% to 96.4%).

CONCLUSIONS

- Shift of Zimbabwe's PMTCT Program to Option B+ resulted in dramatic and significant increases in the number of HIV positive pregnant women initiated on ART in Mashonaland Central Province.
- Introduction of Option B+ saw an initial surge in maternal ART initiation rates as HIV positive women in care but not on ART were initiated under revised guidelines.
- Following this 'ART catch-up' phase, initiation rates stabilised proportionate to number of HIV positive women identified in ANC.
- Benefits of increased ART coverage will only be realised if HIV women initiated on ART have high retention and adherence.
- Future research should document longitudinal individual outcomes of HIV positive mothers and their HIV-exposed infants enrolled in Option B+.
- There is need for evidence-based interventions to enhance retention and adherence of women enrolled on Option B+ - with particular emphasis on the late post natal period.

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