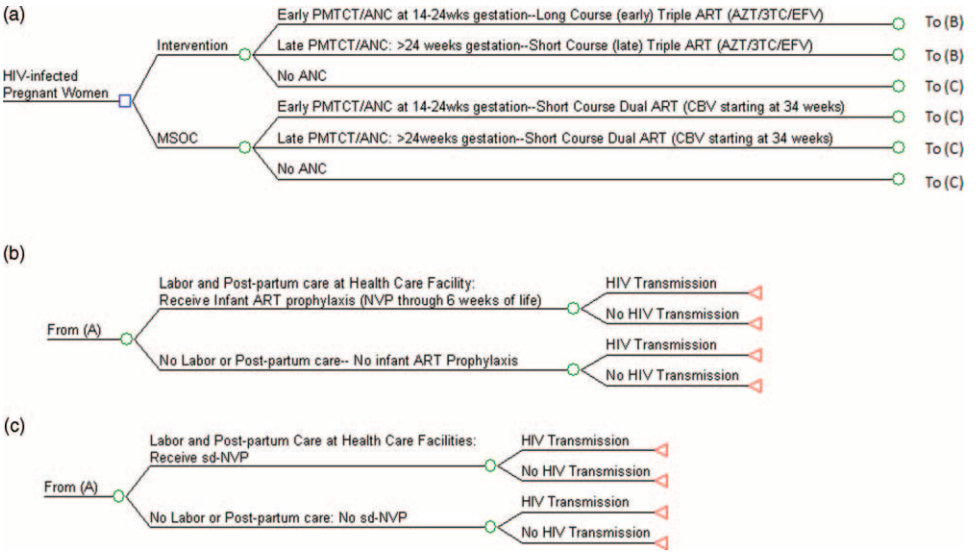
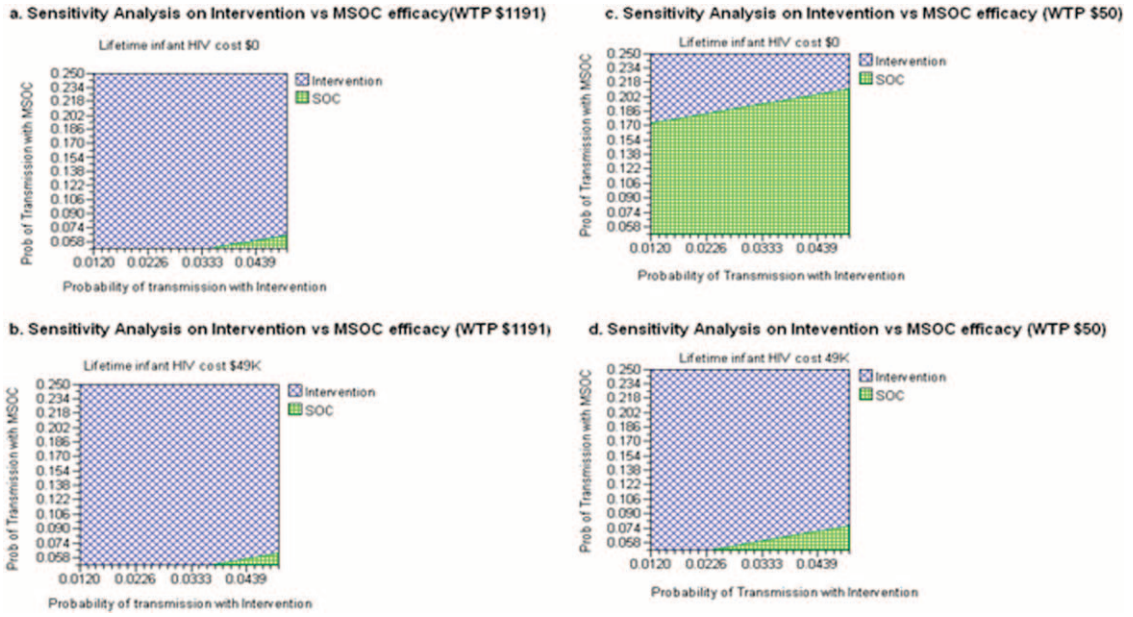
Supplemental Digital Content 1: Decision-analysis model for cost-effectiveness evaluation.

Model details: For both the *Intervention* and *MSOC*, we incorporated ANC utilization with 58% of women receiving antenatal care in the base-case. For the base-case, we estimated 75% of women who receive ANC presented early in pregnancy (as early as 14 weeks, and before end of 2nd trimester), with the remainder presenting later. For the *Intervention,* we designated women presenting for early ANC as having received *Long-course Triple-ART* (AZT/3TC/EFV) regimen, while women presenting for late ANC received *Short-course Triple-ART regimen*. Infant prophylaxis was administered if the mother received labor/post-partum care at a health care facility. For the *MSOC,* women received *Short-Course Dual ART* (CBV [combivir]-AZT/3TC) if they presented for ANC, irrespective of early or late presentation into ANC care; they additionally receive sd-NVP if they presented to health care facility for delivery. In both arms, women not receiving ANC were eligible for sd-NVP if they delivered at a health-care facility. For both arms, we assumed 100% adherence and initiation of PMTCT regimens for those presenting for care. Estimated efficacy of these regimens is described in Table 1. For the *Intervention,* we included 6 months of diagnostic costs with 4 HIV provider visits and 4 ANC visits for those presenting for early ANC; 3 months of diagnostic costs with 2 HIV provider visits and 2 ANC visits were included for late ANC presentation. Only 1 month of diagnostic costs and 1 HIV provider visit was attributed to the overall *MSOC* program costs, regardless of duration of ANC. All HIV-diagnosed women were assumed to have received VCT.



Supplemental Digital Content 2: Three-way Sensitivity Analysis on MSOC efficacy, Intervention efficacy, and lifetime health costs for HIV-infected infant.

Blue hash represents points at which the Intervention would be considered cost-effective; Green hash represents points at which the MSOC would be considered cost effective. a)cost-effectivness of Intervention vs. MSOC when lifetime HIV cost for an infected infant is set to $0 and a WTP threshold of Nigerian GDP ($1191) b)cost-effectiveness of Intervention vs. MSOC when setting lifetime HIV cost for an infected infant to an upper limit of $49,000 and a WTP threshold of Nigerian GDP ($1191) c) cost-effectivness of Intervention vs. MSOC when setting lifetime HIV cost for an infected infant to $0 and a WTP threshold of $50) d)cost-effectiveness of Intervention vs. MSOC when setting lifetime HIV cost for an infected infant to $49K and a WTP threshold of $50.



Supplemental Digital Content 3: Two-way Sensitivity Analysis on PMTCT coverage.

Y axis represents different levels of PMTCT coverage for the *Intervention*; X-axis represents different levels of PMTCT coverage for *MSOC*. Blue hash represents points at which the Intervention would be considered cost-effective; Green hash represents points at which the MSOC would be considered cost effective.