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-effectiveness 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-effectiveness 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.