

Title: Comparison of HIV self-testing (HIVST) distribution models in Zambia: potential for impact and sustainability

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BACKGROUND

Zambia is piloting HIV self-testing (HIVST) to inform the national HIV testing guidelines through the projects: 'HIV Self-Testing Africa' (STAR) and home-based HIVST distribution model (HB-HIVST). Under STAR, HIVST kits were distributed through community-based distribution agents (CBDAs), voluntary medical male circumcision (VMMC) and health facility (HF) models. HB-HIVST distributed HIVST kits through door-to-door HIV testing services (HTS) offered the choice of counsellor-provided finger-prick rapid HIV testing or oral HIVST in the presence or absence of the counsellor. We present the cost of both HTS models and examine the impact and sustainability of each model.

METHODS

We undertook full economic costing with prospectively collated costs and outcome data from the start of implementation: for STAR over 11 months (July 2016- May 2017) in 16 communities and for three months (December 2016 - June 2017) in four communities for HB-HIVST. All costs are presented in 2017 US\$. Numbers of tests and unit costs per test are presented by model.

RESULTS

STAR distributed 127,804 HIVST kits, through CDBA (81%), HF (10%) and VMMC (9%) models. The HB-HIVST model tested 4,561 individuals. The costs per HIVST kit distributed were US\$17.36 (SD: US\$8.60), US\$16.23 (SD: US\$4.95), US\$17.31 (SD: US\$8.66) and US\$18.45 for CDBA, VMMC, HF and HB-HIVST models, respectively. Though averages, were similar, quantities distribution and total costs varied widely across communities [pic_1].

CONCLUSIONS

Costs for HIVST distribution were similar across the three models suggesting programmes incorporate HIVST flexibility to consider preferences vary across

individuals and broadening choice is likely to increase coverage. Consequently, HB-HIVST model demonstrates that HIVST can be integrated within existing structures of community distribution of health products. Further research, around technical efficiency and distribution saturation, is needed for great impact on narrowing HIV testing gaps.

Figure 1: Cost of STAR models across communities (2017 US\$)

Figure 1a . cost per HIVST kit distributed (CBDA model) wit kits distributed

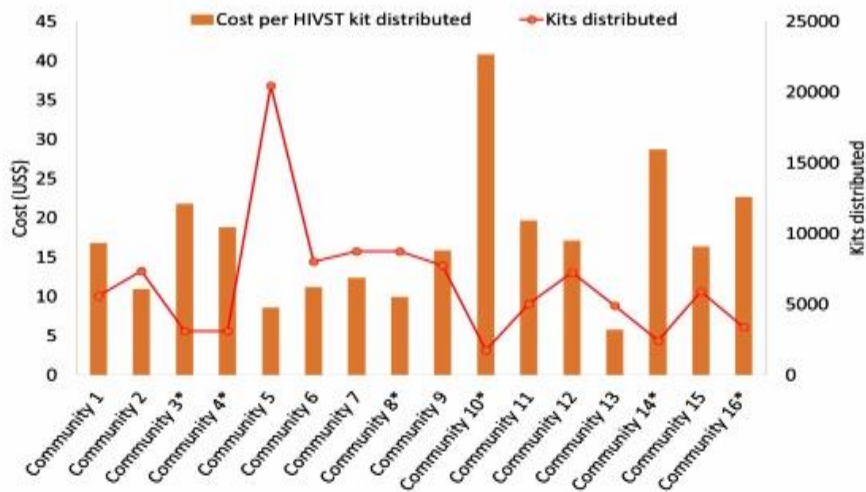


Figure 1b. Cost per HIVST kit distributed (VMCC model) with kits distributed

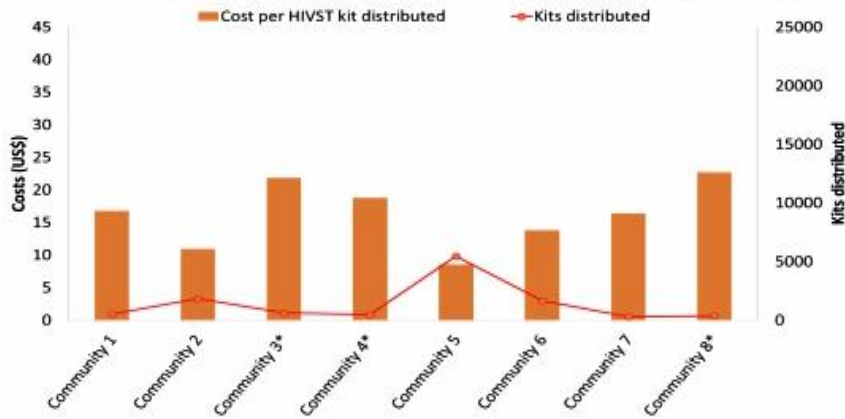


Figure 1c. Cost per HIVST kit distributed with HIVST kits distributed (HF)

