

Implementing Social Network Strategy with Fidelity Facilitates High HIV Testing Yield among Key Populations

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Background

Due to high levels of stigma and discrimination, key populations (KP) -- men who have sex with men, people who sell sex, people who inject drugs, and transgender persons -- may be missed with routine HIV testing services (HTS). Social network strategy (SNS) is a network-based, HIV case-finding approach that encourages people living with HIV or persons at high-risk for HIV infection to refer their sexual, drug-using, or social contacts for HTS. Thus, SNS can efficiently identify KP members who have undiagnosed HIV infection.

Results

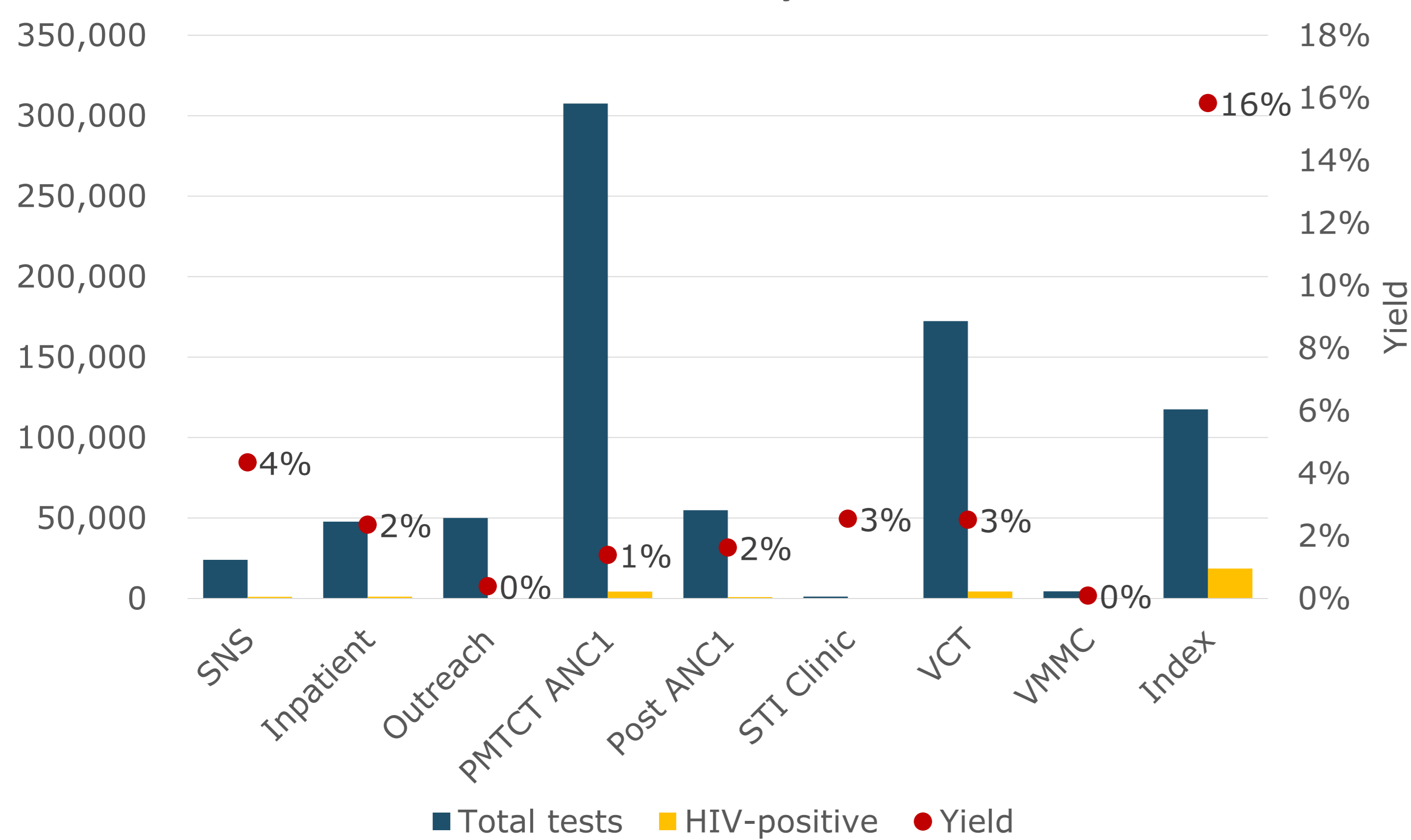
HIV testing yield (percentage of people tested who are diagnosed with HIV) for SNS was reported for each country selected in 2022 and ranged from 4.4% in Kenya to 20.4% in Zambia (Figures 1-4). The number of HIV tests conducted using SNS varied greatly. Tanzania conducted the most with 43,876 tests and Zambia conducted the fewest with 6,689 tests. Within each country, SNS testing yields were generally higher or comparable to other HIV testing modalities, except for index testing, which is another network-based testing modality. In these programs, SNS attempts to reach KP, while outreach, VCT, and the other modalities reach general and key populations.

Methods

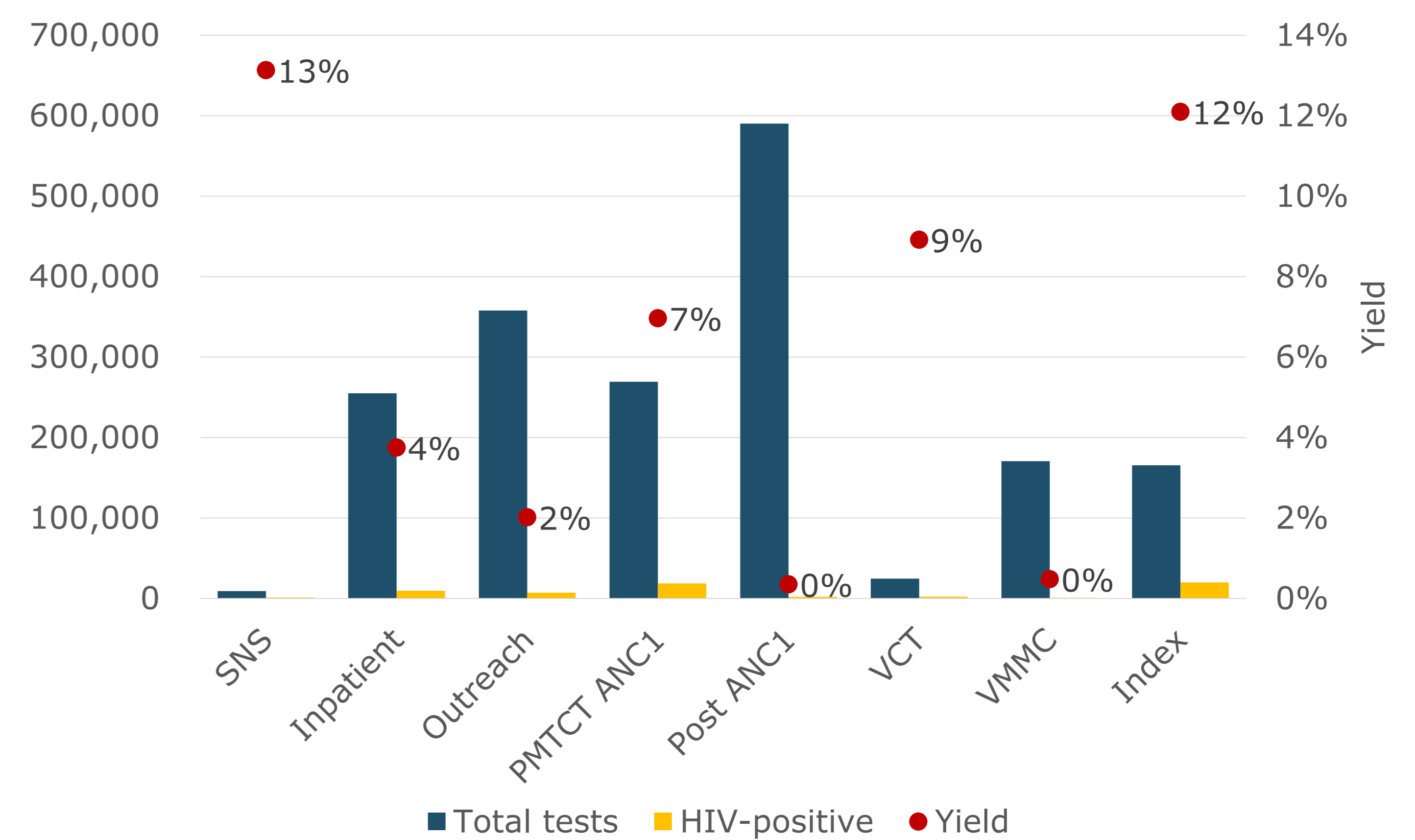
The U.S. Centers for Disease Control and Prevention (CDC) has introduced SNS in 17 PEPFAR countries. We used routine program indicators to assess performance of SNS versus other testing methods. Kenya, South Africa, Tanzania, and Zambia were selected as examples of countries with SNS programs that operate with fidelity to the SNS model, which includes the core elements of engagement with KP civil society on implementation strategy, use of coupons for recruitment, proper coupon tracking, well-trained staff, and data monitoring. SNS implementation began in 2019 in Kenya, and in 2020 in South Africa, Tanzania, and Zambia. Population- and region-specific considerations were incorporated into the SNS approaches in each country, customizing SNS for their specific needs.

Figures 1-4. HIV testing results comparing social network strategy to other routine HIV testing modalities among CDC-funded key population programs in Kenya, South Africa, Tanzania, and Zambia, 2022.

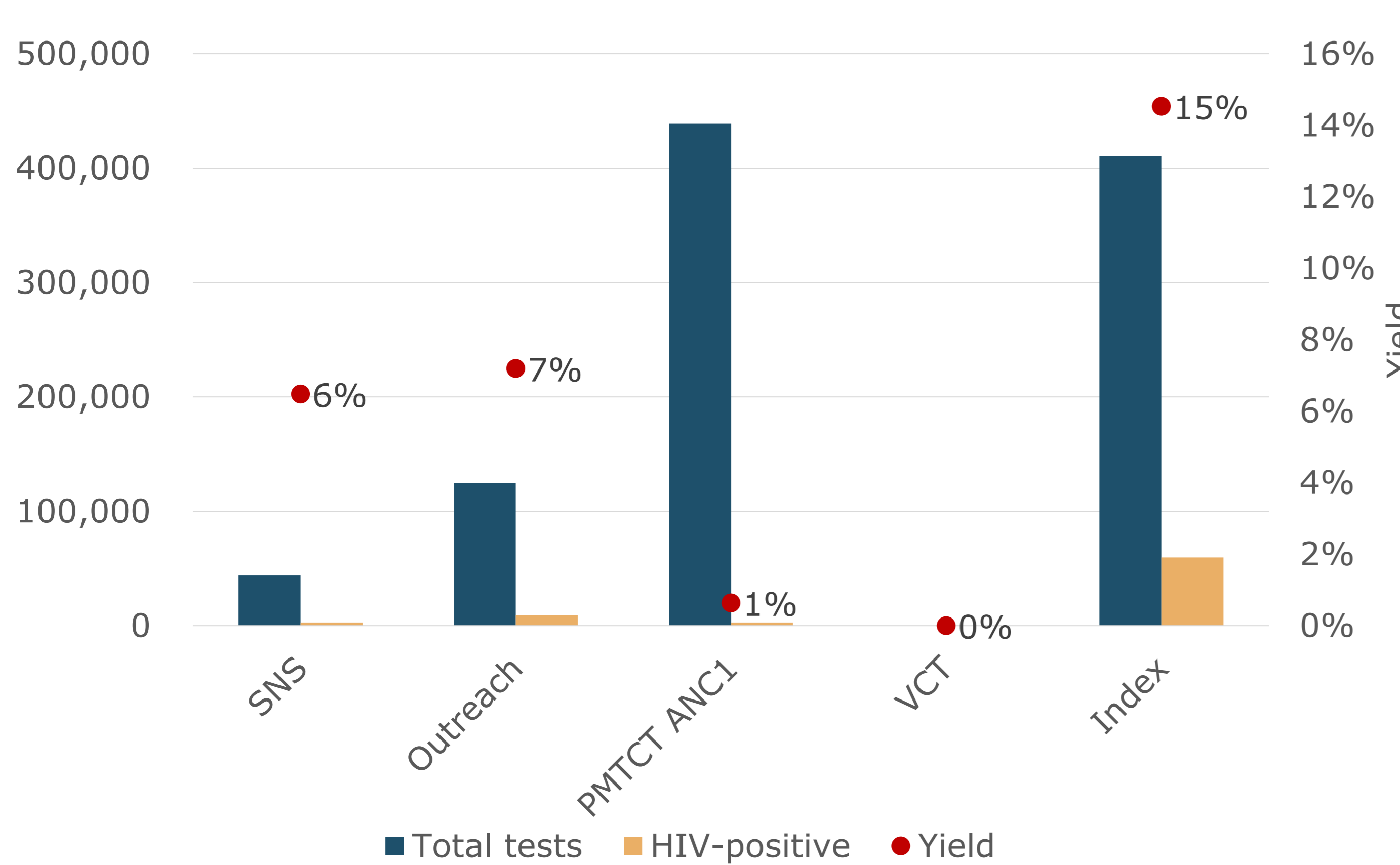
1. Kenya



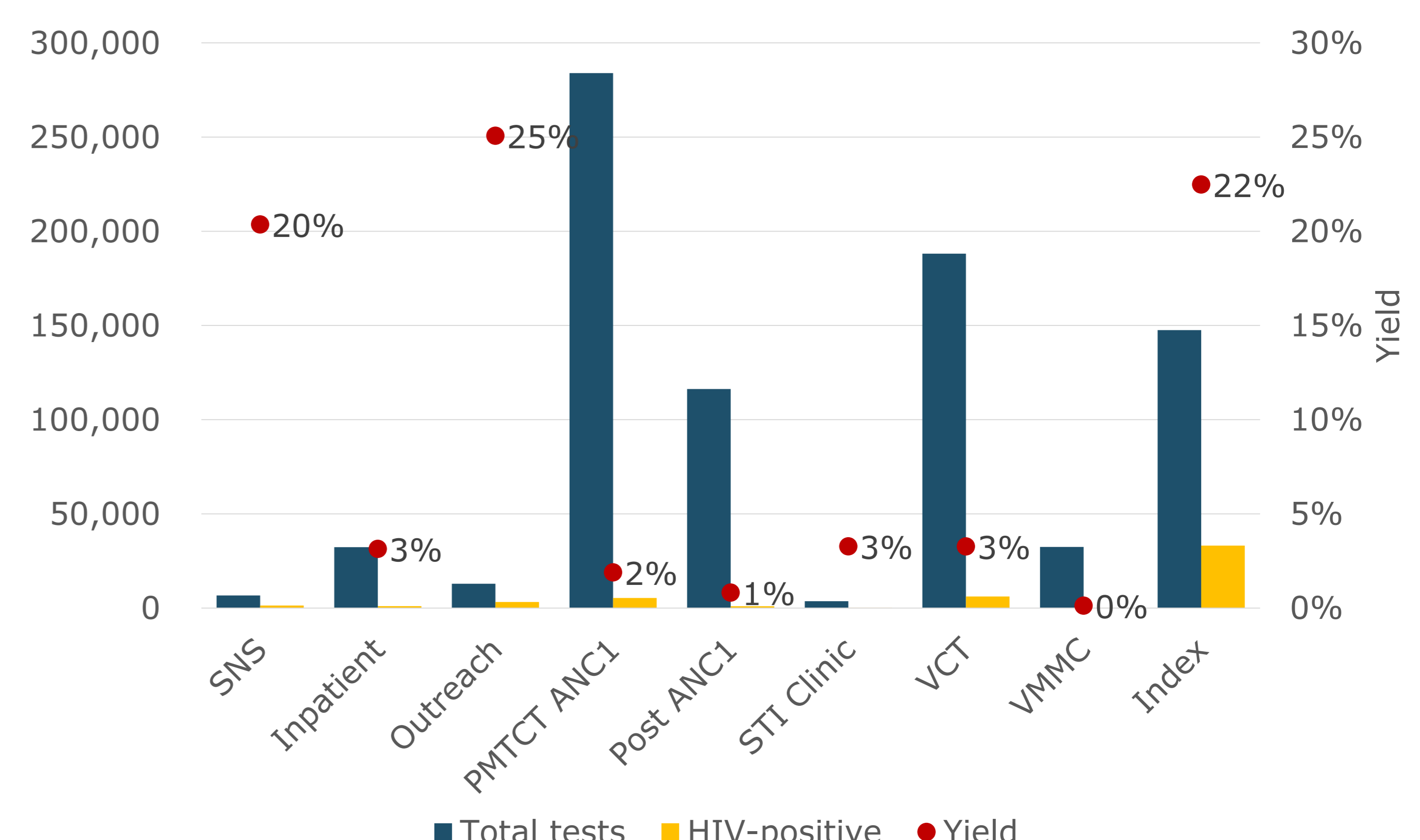
2. South Africa



3. Tanzania



4. Zambia



Legend: PMTCT ANC1: Pregnant women tested at their 1st antenatal care clinic for their current pregnancy are reported under this modality. Post ANC1: Pregnant or breastfeeding women who receive a test after their first antenatal care visit; this includes women who are tested later in pregnancy, during labor & delivery, and while breastfeeding. STI: Persons seen in a designated sexually transmitted infections clinic as well as patients seen in the OPD for STI symptoms. TB: Persons referred for HIV testing because they are a confirmed Tuberculosis case. Emergency: Persons tested or seen in a designated emergency department or ward for the immediate care and treatment of an unforeseen illness or injury. Inpatient: Provider-initiated treatment and care occurring among those patients admitted in the inpatient and surgery wards. VMMC: Includes HIV testing for males conducted as part of voluntary male medical circumcision programs in both facility and mobile outreach programs. VCT: Voluntary counseling and testing.

Conclusions

- SNS continues to be an effective strategy for HIV case-finding among KP, achieving HIV testing yields that are comparable or more efficient than many other testing modalities.
- Each SNS program was customized to the local context; however, the core elements within the strategy are important to identify undiagnosed KP and achieve high HIV testing yields.
- Scaling up SNS with fidelity to the core elements can help identify KP who are not reached by other testing modalities.