Reaching the First 90: Improving HIV Testing Yield in Zimbabwe

BACKGROUND

The Government of Zimbabwe adopted the UNAIDS 90-90-90 Strategy to end HIV/AIDS by 2020, which aims to: diagnose 90% of people living with HIV (PLHIV); 90% of diagnosed PLHIV are initiated and retained on antiretroviral therapy (ART); and achieve 90% viral suppression for ART patients.

Zimbabwe has made significant progress towards the UNAIDS first 90 target with 74.2% of PLHIV aware of their status. However, there are existing challenges in testing, especially in reaching males and communities in remote geographic locations. Currently in its third year, the five-year Zimbabwe HIV Care and Treatment Project (ZHCT) is funded by USAID and implemented by FHI 360/Zimbabwe. The project aims to provide the most hard-to-reach populations with HIV testing, linkage to ART, and retention services.

ZHCT uses innovative testing strategies to improve HIV testing yield, specifically community index testing (CIT) and sexual network testing (SNT). ZHCT also engages in coverage mapping using mobile trackers and geographic information systems (GIS) as a tool to improve outcomes.

APPROACHES

Community Index Testing (CIT)

ZHCT implements Community Index Testing (CIT) in eight districts, specifically targeting adolescents, young women, pregnant and breastfeeding women, men and sexual partners. CIT is known to have an improved positivity rate, or yield, compared to traditional community-based HIV testing services (HTS) approaches like door-to-door or outreach.

Between March 2016 and December 2017, the project identified HIV-positive index cases at various service delivery points at health facilities. The index cases were followed up by trained nurse testers who provided HTS to their sexual partners and children at the household level. Those identified to be HIV-positive were linked to care and confirmed by being recorded in the health facility pre-ART register.

Between March and June 2016, when the ZHCT project implementation started, the project reached a total of 11,543 clients with HTS and identified 733 (6%) clients living with HIV. After the start-up/learning curve, from July 2016 to December 2017, the ZHCT reached a total of 40,478 people and found a positivity rate among them of 31%, which subsequently increased to 39%. FHI 360’s community index testing has an average HIV-positivity rate almost 10 times greater than the health facility yield rate of 4%. Almost half (48%) of all those tested for HIV were male, while 48% were aged 25-49 years, and 75% of those identified as HIV-positive were linked to care.

Sexual Network Testing (SNT)

Sexual network testing (SNT) is a component of CIT that focuses on identifying the index client’s sexual contacts within a specified period. ZHCT implements SNT by strengthening the community health system and training nurses and community health workers to identify HIV-positive individuals.
and provide counseling. After screening for risk of interpersonal violence and with the consent of the index client, trained nurse counselors reach out to the identified partners to offer HIV testing and counseling services and facilitate entry into care.

Between October 2016 and December 2017, 18,332 HIV-positive index clients were identified from 330 health facilities. Using SNT, 18,052 sexual contacts in the community (48% being males) were tested, with a positivity rate of 46% (8,328). Of these, 70% were linked to care. Overall, FHI 360 has reached 15,251 men with HIV testing services, of whom 72% were between 25-49 years.

**DHIS2 Mobile Trackers**

Despite progress toward the UNAIDS 90-90-90 goals, there are gaps in HIV case identification in remote geographical areas in Zimbabwe. ZHCT conducted a three-month pilot intervention to test the use of an electronic HIV testing register in Makoni District, to support the reach of household index case testing activities to remote areas.

DHIS2 Mobile Tracker Capture was customized to include capturing of geo-coordinates which allowed the pinpointing of the geographical location of HIV testing activities. The application works offline and syncs with a central server when there is connectivity. GIS was used to analyze and present spatial data collected between October 2017 to December 2017.

The pilot found a positivity rate of 32%, with 98% of positives successfully linked to care among the 146 individuals tested. The results showed that most of the clients tested lived within four kilometers of the major roads or in peri-urban areas. Employing electronic systems and GIS mapping in the provision of HIV services will help to improve service coverage and identification of “hotspots” when feedback is provided to field teams in a timely manner.

**SUMMARY**

FHI 360 and ZHCT are incorporating approaches to scale up CIT and reach people living with HIV who would not ordinarily access HIV testing services from conventional, facility-based testing modalities. Further analysis should be conducted to determine the cost-effectiveness of these strategies, as the data suggest that these methods are better able to reach the highest-risk groups.

Using innovative approaches, ZHCT is identifying a critical group of individuals at high risk for HIV, reaching more HIV-positive people, and facilitating their entry into care. Through these strategies, ZHCT is able to reach the President’s Emergency Plan for AIDS Relief (PEPFAR) priority populations of adolescents, young women, and men.