Reaching the first 90: HIV self-testing for key populations

HIV self-testing (HIVST) helps countries expand people’s access to HIV testing services; reach those at high risk who may not otherwise get tested; and achieve the first 90 of UNAIDS’ 90-90-90 targets, that 90 percent of all people living with HIV should know their status. With HIVST, an individual collects his or her own oral fluid or blood to perform an HIV diagnostic test and interprets the result in a private setting, either alone or with someone he or she trusts. Among key populations, who have low uptake of other testing options, reported benefits include privacy, convenience, pain-free testing, and ease of use. In 2016, the World Health Organization (WHO) released new guidelines recommending that HIVST should be offered as an additional approach to HIV testing services (strong recommendation, moderate quality of evidence). Although self-tests achieve acceptable sensitivity and specificity, all reactive and invalid results must be linked for confirmatory testing because self-tests are meant to be screening tests.

ADVANTAGES

- Addresses barriers faced by key populations to uptake of HIV testing and counseling (HTC), including privacy and confidentiality concerns, fear of stigma and discrimination from health care providers, and limited access to HIV testing services. As a result, HIVST may increase people’s access to and frequency of testing.
- Reaches first-time testers and people not currently reached by existing HTC services by providing them an opportunity to test themselves discreetly and conveniently.
- Increases the convenience of frequent testing, which is beneficial for high-risk and key populations. HIVST minimizes the number of facility visits people must make, thereby reducing both the cost to clients of frequent testing and the burden HIV testing places on health services.

EVIDENCE

Reach and Acceptability

- With HIVST, uptake of HIV testing among female sex workers (FSWs) increased and uptake and frequency of HIV testing more than doubled among men who have sex with men (MSM) compared to standard HIV testing.
- MSM who self-tested were twice as likely to have an HIV-positive test than those who underwent standard testing.
- Higher risk MSM may be more likely to take up HIVST than standard facility-based HTC.
- With HIVST, uptake of testing among FSWs improved for first-time testers and infrequent testers.
- HIVST is found to be more acceptable among the hardest to reach key population members, because it offers greater patient confidentiality than local health care systems, which may not have such safeguards in place.

Safety and Low Risk

- HIVST does not increase HIV risk behaviors, such as unprotected anal intercourse.
- HIVST does not decrease uptake or frequency of testing for STIs and does not increase the number of people who become infected with STIs.
- HIVST has not increased reports of social harms, adverse events and behaviors, or violence.

Links to Care

- With intensified linkage strategies, including front-end counseling and clear follow-up procedures, the rate at which links are made to care is promising. Studies implementing HIVST and tracking links to confirmatory testing and care have shown that:
  - 100 percent of MSM, transgender people, and people who inject drugs who had a reactive self-test linked to confirmatory testing in Vietnam
  - 88 percent of FSWs’ partners with a reactive self-test enrolled in care in Kenya
  - 99 percent of FSWs with a reactive self-test linked to care in Zimbabwe

Learn more about LINKAGES by visiting www.fhi360.org/LINKAGES or writing to Meghan DiCarlo at Mdicarlo@fhi360.org.
**INCORPORATING HIVST INTO LINKAGES**

- HIVST can be easily incorporated into LINKAGES' country programs. The graphic below shows some of the possible delivery channels for HIVST. HIVST can be advertised through LINKAGES' peer outreach teams and at known hot spots as part of current activities as well as at pharmacies or on social media and dating sites. Other options can be added based on your country context. HIVST can be performed unassisted or with a peer.
- Through unassisted HIVST, support to self-testers is indirectly provided via telephone hotlines; leaflets; referral information; websites; support groups; demonstration videos; and other services for HIV treatment, care, and prevention.
- Peer-mediated/assisted HIVST involves support from a peer outreach worker or navigator. Their support may include a demonstration of how to use the test, pre- or post-test counseling, and referrals to additional post-test services. Face-to-face assistance could be provided during self-testing (optional).
- In both approaches, LINKAGES provides key population members—before they test—with information about how to use the test and options for enrolling in confirmatory testing and treatment. Peer-mediated self-testers can be linked to confirmatory testing, treatment, and care by the peer. Individuals who choose unassisted self-testing are offered options for post-test follow-up, including preferred means of follow-up (phone; SMS; online; or in person at hot spot, home, or other location) and whom they would like to follow up with them. Follow-up should be conducted within a specified number of days and link those with reactive tests to confirmatory testing and care and treatment.

**HIV SELF-TESTING DELIVERY OPTIONS**

- HIV self-testing advertised
- Where do I want to obtain a self-test?
- Through Peer Outreach Workers
- At Hot Spots
- At Pharmacies
- Dating Sites/Apps
- Online/Social Media
- Where do I want present when I test myself?
- Drop-in Center/Health Facility
- Pharmacy
- Designated Pick-up Point
- Surface Mail
- Peer Outreach Worker
- Where do I want to perform the test?
- Private
- Health Care Worker
- Private
- Private
- Private
- Where do I want to follow up with me to link me to health services (including HIV treatment and care, if reactive)?
- Peer Outreach Worker
- Health Care Worker
- Pharmacist
- Community-Based Organization Worker
- Peer Outreach Worker

**POLICY AND REGULATORY ISSUES TO CONSIDER:**

- Does your country have a national policy and guidelines related to HIVST?
- Are any HIVST kits registered in your country? Are registered kits approved for HIVST and are they WHO prequalified or approved for procurement by the Global Fund or the U.S. Agency for International Development?
- What is the process for procuring and importing HIVST kits given the national regulatory environment?
- Are there other activities related to HIVST underway in your country?

**USEFUL RESOURCES:**

- [OraQuick How-To Video](#)
- [HIVST.org: Clearinghouse of HIVST research studies, tools, guidelines, etc.](#)
- [WHO Guidelines on HIV self-testing and partner notification: Supplement to consolidated guidelines on HIV testing services](#)
- [WHO recommends HIV self-testing: Policy brief](#)
- [Protocols and Tools from the PSI STAR project](#)

**MONITORING AND EVALUATION**

Indicators that should be tracked for HIVST include:

- Number of HIVST kits delivered and to whom
- Proportion of self-testers choosing different delivery and follow-up options
- Proportion of self-testers who are first-time testers
- Change in proportion of key population members who have ever been tested for HIV
- Proportion of self-testers linked to confirmatory testing
- Proportion of self-testers enrolled in care
- Proportion of self-testers initiated on ART

*The graphic illustrates the most likely decisions that will be taken by a self-tester when obtaining their HIVST kits and conducting HIVST. Options under each decision point are not limited by the decisions made in a previous decision point.*

**REFERENCES**