UCSF Center for AIDS Prevention Studies
AIDS Research Institute

how is rapid testing used in HIV prevention?

why rapid testing?

It is estimated that 25% of all HIV+ persons in the US do not know they're infected.[1] Taking an HIV antibody test and knowing one's HIV status are key to preventing the spread of HIV. Many persons who test HIV+ can access counseling, prevention education, support services and medical care to stay healthy and not progress to AIDS. HIV- persons can access counseling and education to remain HIV-. However, even when people choose to get tested, many never return for their results. In public test sites, up to 33% of clients who test HIV- and 25% who test HIV+ never return for their results.[2]

The rapid HIV test is a new, FDA-approved approach to HIV testing that addresses these issues. Conventional HIV testing has been conducted with needle blood draws or mouth swabs which are sent to a laboratory for analysis. Clients need to return to the test site 1-2 weeks later to find out their results. With rapid tests, clients can take the test, receive counseling, and find out their results all in one visit. This can help increase the number of persons who get tested and reduce the number of persons who don't return for their results.[3]

Many government and non-governmental agencies are moving toward rapid testing instead of conventional testing. The Centers for Disease Control and Prevention's (CDC) Strategic Plan for 2005 seeks to increase the number of HIV+ persons who know their HIV status from 70% to 95%—using rapid testing is an integral part of the plan.[1] In California, the goal is to have 80% of all state-funded HIV test sites use rapid tests by the end of 2006.[4]

how is rapid testing done?

Rapid testing uses a finger stick, blood draw or mouth swab to collect samples. The test counselor places the sample in a tube with chemicals to process it, and can read the results in about 20 minutes. Counseling and risk reduction planning with the client can take place during the waiting time, or can be done before or after sample collection.

Within 20 minutes, most rapid tests will either be non-reactive—a negative test result—or reactive—a preliminary positive result. Currently, if a result shows preliminary positive, a second conventional blood or oral sample is required to confirm it. Final confirmation still takes 1-2 weeks. National data indicate that with rapid testing, 95% of clients who received a preliminary positive result returned for their confirmatory results.[5]

There are currently four FDA-approved rapid HIV tests in the US: Reveal, OraQuick, Multispot and Uni-Gold.[6] All tests are extremely accurate, with 99.6-100% sensitivity rates.[7] Only two of the tests—OraQuick and Uni-Gold—are Clinical Laboratory Improvement Amendment (CLIA) waived. OraQuick Advance uses a mouth swab and can be performed in a wider range of settings and temperatures.

Rapid testing can be done in most clinical offices and in a large number of non-traditional health care and outreach settings such as mobile vans, storefronts, shelters, bathhouses,[8] *labor and delivery clinics and emergency rooms. Testing in alternative venues can help increase testing among populations that are mobile or hard to reach, including migrant workers, homeless persons, adolescents and young adults.*[9]

Rapid testing can change the way HIV testing is done. Most HIV test sites currently have counselors and separate phelobotomists who take the blood sample. With rapid testing, the test counselor can also take the sample and analyze it. However, in some rapid test sites, counselors do the consent and counseling and someone else still collects the sample.

is rapid testing rapid counseling?

No. One study found no difference in STD rates after counseling with rapid tests and conventional tests.[10] Rapid tests still allow for plenty of counseling time. Counselors have about 20 minutes between taking a sample and receiving the results to provide focused and specific counseling about the client's real risks and possible exposure to HIV. Rapid testing counseling can be more intense due to the immediacy of getting results.[11]

Clients who receive a preliminary positive result and must return for their confirmation result may be more prepared to deal with their diagnosis. Clients often have had a week to think about what testing positive means and may be more emotionally prepared to listen to and digest referrals and options the counselors can provide.

Says who?

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can my agency/clinic offer it?

Agencies have several considerations to make before deciding to use rapid testing. The client flow will be different because counselors are involved with each client for longer periods of time than during conventional testing. Agencies have greater responsibility because they are handling blood or oral samples. To do this, most agencies must apply to the government for a CLIA certificate,[12] provide quality assurance, keep records and create documentation.

If test counselors are also conducting the test, they may need training to collect and process samples, run controls and track the tests. They will also need in-depth knowledge of referral resources for issues that may emerge in new, more focused HIV counseling sessions. Counselors typically may have concerns about the new testing procedures and counseling initially. After they've been trained and have provided a number of counseling sessions, they become more comfortable and often say they wished they had become involved in HIV rapid testing sooner.[13]

In some clinical settings it is easier to implement rapid testing because healthcare workers are used to taking samples, running controls and using universal precautions. However, clinicians may not be used to counseling when testing for HIV,[14] and may need training to develop stronger counseling skills and provide adequate referrals.

what's being done?

The Metro Atlanta Women of Color Initiative (MAWOCI) brought rapid testing, prevention education and linkage to medical care to African American women in community settings such as churches, college campuses, homeless shelters and public housing. Staff were trained in HIV test counseling, rapid testing and condom demonstrations. To facilitate referrals, MAWOCI mapped local resources, forged alliances with agencies serving women of color and assessed capacity of HIV care doctors and clinics. More than 99% of women returned for confirmatory test results.[15]

The introduction of OraQuick in counseling and testing sites throughout the state of New Jersey resulted in an increased number of previously undiagnosed HIV cases as well as an increased number of patients receiving both their test results and posttest counseling. Within the first year, 10,429 patients received the rapid test. Of this group, 99.7% received their test results, compared to 65% before rapid testing.[16]

In Seattle, WA, the public health department routinely provides rapid testing to persons at high-risk in bathhouses, needle exchange sites and STD clinics. They made this decision after conducting research showing that more people received their test results with rapid testing and it was more cost-effective than conventional blood or oral fluid testing strategies.[8]

The Night Ministry in Chicago, IL, provides rapid testing in health outreach buses for homeless adults and youth and pregnant and parenting teens. The buses are staffed by a nurse, two HIV test counselors and a minister, and offer general health care, mental health services, STD and hepatitis C screening as well as coffee, cookies and condoms. For clients who test HIV+, the program offers bus cards, telephone calling cards and referrals to physicians experienced in providing HIV care.[17]

what is the future of rapid testing?

The future is now. Outside of the US, rapid testing is widely used and confirmatory tests are also done with rapid test, eliminating any waiting period for persons who test HIV+. Manufacturers have been slow to seek approval for tests in the US because the FDA has strict policies about licensing new HIV tests.

Rapid testing has been met with great enthusiasm in some areas and great trepidation in others.[18] *As federal and state governments increase requirements for rapid testing, resources for training, technical assistance and funding need to increase for the agencies that implement rapid testing. State and federal reimbursement protocols, as well as public and private insurance, need to be changed to encourage rapid testing.*

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