

# Mobile Clinics in India Take to the Road

## Bringing HIV Testing and Counseling and Sexually Transmitted Infection Services to Those Most at Risk



Mobile clinic in the Nagpur District of Maharashtra, India.

Ed Scholl

Sanjay takes his lunch break at his construction job near the city of Nagpur, in the state of Maharashtra, India. He migrated here in search of work from his home in the northern state of Madhya Pradesh. He is 23 years old, single, and hopes to earn enough to get married, start a family, and help his parents back home. During his break, Sanjay (not his real name) decides to visit the big van parked near the construction site, where an outreach worker told him he can get free testing for HIV and other sexually transmitted infections (STIs). He is curious and a bit concerned about his HIV status, because he knows that visiting sex workers back in town, as he and his fellow workers occasionally do, puts him at risk for HIV.

Sanjay enters the van and is greeted by the counselor, who explains how HIV and STIs are transmitted and what he can do to avoid them. The counselor shares some pamphlets, printed in the local language of Marathi, that give him additional information about HIV and STI prevention. She shows him how to use a condom and offers him some. Sanjay then signs a consent form to obtain an HIV test.

Next, he walks to the rear of the van to visit a doctor, who goes through a checklist of STI symptoms and provides a physical exam. Finally, he goes to the laboratory in the front of the van, where blood is drawn. He is told to come back in four hours for the test results. At the end of his shift, he returns to the van and the counselor tells him, much to his relief, that he is HIV-negative and does not have an STI. She reminds him how he can stay healthy and avoid HIV and STIs and answers all of his additional questions.

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Scenes such as this play out every day at the Nagpur mobile clinic and the five other mobile clinics that are part of an innovative program supported by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) through the U.S. Agency for International Development (USAID) and the National AIDS Control Organization (NACO), in coordination with the Maharashtra State AIDS Control Society (MSACS). One of USAID/India's key partners, the Mumbai-based Avert Society, implements the program with other nongovernmental organizations (NGOs) in five districts of Maharashtra, which were chosen for their high rates of HIV prevalence. While mobile clinics have been used before in India to provide health services, the Avert Society program is one of the first programs to offer both HIV testing and STI testing and treatment to most-at-risk populations (MARPs). The program is also innovative in the way that it partners with government and other NGOs who work closely with the populations most affected by HIV and STIs.

## India's Epidemic

Given the nature of the HIV epidemic in India, with most infections concentrated in specific groups within the population and in certain areas of the country, USAID/India supports interventions focused on MARPs, such as female sex workers (FSWs), men who have sex with men (MSM), transgender (TG) individuals, and people who inject drugs (PWID). Also targeted are "bridge populations," who have intimate contact with MARPs. These may include the clients of sex workers, many of whom, like Sanjay, are migrants, or the wives of MSM.

The state of Maharashtra, encompassing India's largest city, Mumbai, is one of the states most affected by HIV in the country. Though HIV prevalence in antenatal clinics is only 0.55 percent,

the state has the highest reported rates of HIV among FSWs (7.4 percent). Similarly, high rates are found among PWID (20 percent), MSM (11.2 percent), and TG people (16.4 percent; Maharashtra State AIDS Control Society 2009). The Indian Government considers men who buy sex to be the single most powerful driving force in India's HIV epidemic (U.N. General Assembly Special Session 2010), given their role in HIV transmission to the general population.

## Launching Mobile Clinics

Recognizing the high HIV prevalence among MARPs in Maharashtra and the importance of targeting bridge populations such as migrants and truckers, USAID/India, in collaboration with the Government of Maharashtra and NACO, sought to expand HIV testing and counseling and prevention-oriented outreach to these populations through the use of mobile clinics. A mobile clinic demonstration program was approved for implementation by the Avert Society (an NGO based in Mumbai), with funding provided by PEPFAR. NACO plans to adopt the lessons learned from the demonstration program and scale it up nationally.

The rationale for using mobile clinics, instead of referring clients to existing HIV testing and counseling centers, was based on several assumptions. One was that it would be easier for MARPs and bridge populations (both groups are hereafter referred to as "targeted populations") to access services if a mobile clinic came to select locations near them (e.g., near brothels, cruising spots, truck stops, and migrant workplaces, such as construction sites, brick kilns, and small scale industries) and during convenient times (e.g., evening hours for MSM and mid-morning for truckers). Another was that targeted populations would find it more acceptable to visit mobile clinics where they could be assured of greater

## ABOUT THE AVERT SOCIETY

In 1999, the Government of India signed a bilateral agreement with the U.S. Government to establish the Avert Project, to complement the AIDS control efforts of the Government of Maharashtra. The Avert Society supports the National AIDS Control Program and works in collaboration with the Maharashtra State AIDS Control Society (MSACS). MSACS is implementing a comprehensive HIV prevention, care, and treatment program throughout the state of Maharashtra and is supported by the Mumbai District AIDS Control Society.

The Avert Society focuses on most-at-risk populations, such as female sex workers, men who have sex with men, and transgender individuals, as well as on bridge populations such as migrants. They implement community mobilization activities to increase HIV testing and counseling, prevention of parent-to-child transmission, and treatment services in five high-prevalence districts. Additionally, they implement workplace interventions throughout the state of Maharashtra.

The project supports the Technical Support Unit in Maharashtra and Goa states, supporting the scale-up and strengthening of HIV programs in accordance with the strategies outlined in the third National AIDS Control Program. The National AIDS Control Organization (NACO) selected the Avert Project as the lead agency to implement the Round Seven grant from the Global Fund to Fight AIDS, Tuberculosis and Malaria to expand an outreach worker (“link workers”) program in the state of Maharashtra. In addition, the Avert Project was identified by NACO as the State Training Resource Center for training nongovernmental organizations on core skills in targeted intervention programs for most-at-risk populations.

anonymity, respect, and attention than at venues such as government hospitals. STI screening and treatment were also added to the mobile clinic service package, because these are not offered at government HIV testing and counseling centers.

To implement the mobile clinic program, the Avert Society procured six large vans from Eicher Motors, an Indian manufacturer of vans, trucks, and buses. Each van was remodeled and subdivided into three rooms: one for counseling, one for medical exams, and one for collecting and processing blood samples using HIV rapid tests and rapid plasma reagin (RPR) tests for syphilis.

After procuring and equipping the mobile clinics, the Avert Society selected a sub-grantee in each of the five priority districts (Nagpur, Thane, Jalna, Aurangabad, and Solapur) to operate the mobile clinic. These sub-grantee NGOs then hired the staff for each mobile clinic, including a full-time doctor, counselor, lab technician, and driver. Training

was provided by MSACS for the counselors and lab technicians and by the Avert Society for the doctors. All staff also received periodic refresher trainings.

The mobile clinic program in Maharashtra officially began in July 2010 in the district of Aurangabad. By September, a total of five mobile clinics were operating, one in each of the five priority districts. A sixth mobile clinic was inaugurated in June 2011 in Thane district, which now has two mobile clinics given its large geographic area.

## Implementation

**Planning and promotion:** Careful scheduling and advance outreach and promotion among the targeted populations are key to the successful implementation of the mobile clinics. At the beginning of each month, the NGO responsible for the mobile clinic in each district convenes a

scheduling meeting for all of the NGOs working with the targeted populations in that district. Together, they work out a schedule with a detailed list of locations, days, and hours when the mobile clinic will arrive at a given location and the type of target group expected to attend. For example, in Thane district, the NGO Udaan Trust, which serves the MSM community, proposed scheduling and locations that would best serve that community; namely evening hours near MSM cruising spots. NGOs serving other targeted populations also propose dates, times, and locations until the monthly schedule is complete.

Following completion of the schedule, each NGO's outreach workers and peer educators spread the word and encourage their contacts to visit the mobile clinic for HIV and STI testing on the dates selected. If the NGO has done its advance work properly, there will be clients waiting when the mobile clinic arrives in a community. Sometimes, the collaborating NGOs also set up a tent at the location to promote the services of the mobile clinic, register clients with the NGO, and do advance counseling using the NGO's own counselors and peer educators.

**Client flow:** Work begins immediately on arrival of the mobile clinic in a community. Clients, entering the van one by one, or in small groups if the client load is high, are seen first by the counselor. The counselor greets the client, explains the services available, obtains consent for HIV testing, provides pre-test counseling and information about HIV and STI prevention, conducts condom demonstrations, and shares informational brochures.

Next, the client may see the doctor or go directly to see the lab technician. All FSWs, MSM, TG people, and PWID (referred to in the program as "core groups," as opposed to other targeted groups, such as truckers and migrants, who are presumed to be at less risk of an STI) are encouraged to



**Mobile clinic with driver and promotional materials at a construction site in Nagpur. Many migrant workers attend the clinic during their lunch break.**

see the doctor for a regular medical checkup and an exam to look for signs of STIs. Currently, the gynecological exams are external only. However, the Avert Society has ordered specula to allow for internal vaginal/cervical examinations, which the doctors will begin performing following training. Though migrants and truckers are not automatically seen by the doctor, they are given a medical examination if they exhibit any signs or symptoms of an STI. When a new client from a core group is seen by a doctor, he or she is also given presumptive treatment for STIs, in accordance with NACO norms. The doctor gives other clients a prescription for STI treatment if they have symptoms consistent with an STI syndrome (a discharge, an ulcer of the genital tract, or lower abdominal pain in women). Treatment (either directly by the mobile clinic doctor for core groups or through a prescription for migrants or truckers) is one of seven prepackaged STI kits that contain medicine specific to the STI syndrome detected.

After counseling and possibly a medical exam, the client goes to the laboratory room for HIV and STI testing. Blood is collected, according to NACO guidelines, through venipuncture; 4 mL is stored in a blood collection tube for later testing. The client is asked to return for the results, typically three



to four hours later. The lab technician usually waits until all of the clients have been seen before he or she begins testing all of the samples collected. The blood is first separated in a centrifuge and the serum is used to perform both syphilis and HIV testing. Syphilis testing is performed using the RPR test and HIV testing is done using the Standard Diagnostics Bio-line HIV 1/2 3.0 rapid test. Confirmatory tests may vary, but are also rapid tests.

When clients return for their results, the counselor provides individual post-test counseling. If a client fails to return for test results or if services were provided in the evening, the results are given to the counselor of the collaborating NGO who originally referred the client, and that counselor will seek out the client and provide the results and post-test counseling. Following NACO norms, all clients from core groups who test positive for syphilis receive immediate treatment; other clients are given a prescription for treatment. Any client who tests positive for HIV is given post-test counseling and then referred to the nearest government treatment center that offers free drugs and medical care for people living with HIV.

**Commodity procurement:** Most of the commodities and HIV test kits used in the mobile clinics are provided by NACO, through MSACS and the District AIDS Prevention and Control Units (DAPCU), as part of the host country contribution. These include all the HIV test kits, medical supplies, such as gloves and syringes, STI treatment kits, and male condoms. Female condoms are not provided, but many of the collaborating NGOs obtain them from a social marketing entity (Hindustan Latex Family Planning Promotion Trust) and sell them to interested clients. RPR tests are typically purchased by the Avert Society directly from the manufacturer and distributed to the mobile clinics. The Avert Society also makes emergency purchases of selected commodities when shortages occur.

## Results

### Client volume and services provided:

Although the mobile clinic program has only been operating for about a year, it has shown promising results. A typical day brings in 35 to 40 clients from high-priority groups, more than are usually seen daily in government HIV testing and counseling centers. The NGOs and their outreach workers and peer educators assert that they are reaching greater numbers of high-risk clients than they did before the program began. The mobile clinics also offer the advantage of STI screening and syphilis testing, which are not available at government or NGO testing and counseling centers.

There were start-up challenges, including frequent turnover of staff during the first six months, and some problems with NGO management of the mobile clinics. All six mobile clinics have been operating since June 2011, but for most of the year before, only four mobile clinics were operating continuously.

Data reported by the NGOs operating the mobile clinics in each of the program's five priority districts are shown in Table 1.



Counselor on the Nagpur mobile clinic.

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**TABLE 1. MOBILE CLINIC SERVICES BY DISTRICT, JULY 2010 TO JUNE 2011**

	<b>Aurangabad</b>	<b>Nagpur</b>	<b>Solapur</b>	<b>Jalna</b>	<b>Thane</b>	<b>Total</b>
Clients that attended mobile clinics	6,046	2,893	58	2,648	5,378	<b>17,023</b>
Regular medical checkups conducted	4,547	680	0	313	1,652	<b>7,192</b>
STI cases treated*	293	361	1	109	435	<b>1,199</b>
HIV tests given	5,321	8,943	3,663	4,422	4,970	<b>27,319</b>
HIV-positive tests	35 (0.7%)	87 (1.0%)	24 (0.7%)	22 (0.5%)	103 (2.1%)	<b>271 (1.0%)</b>
RPR tests given	2,730	1,588	37	2,842	2,570	<b>9,767</b>
Positive for syphilis	40 (1.5%)	6 (0.4%)	0 (0%)	25 (0.9%)	17 (0.7%)	<b>88 (0.9%)</b>

\*Per syndromic management of STI guidelines.

One problem that the program has experienced is incomplete reporting by some of the NGOs who operate the mobile clinics in each district. This has resulted in some of the services presented in Table 1 being underreported. In addition, some NGOs have selectively reported services (e.g., HIV tests), while failing to report others.<sup>1</sup> The Avert Society has recently begun asking mobile clinic staff to email their daily report of activities in an effort to improve reporting.

The Avert Society and its NGO collaborators consider the mobile clinics a good complement to the fixed testing and counseling centers operated by the government and NGO providers. Indeed, the mobile clinics are responsible for providing nearly half of all HIV testing and counseling services for MARPs in Maharashtra, according to PEPFAR reports.

**Quality of services:** Client satisfaction is one measure of the quality of services. The Avert Society has not yet conducted any evaluation of client satisfaction (through post-visit interviews or “mystery clients” recruited to pose as clients and

report back on their experiences). However, the collaborating NGOs who work closely with the targeted populations and refer clients to the mobile clinics report very positive comments from their clients. The authors also conducted several focus groups among FSWs, MSM, and migrant workers and heard positive reports about the services they received, as well as the interaction they had with staff. The most common feedback heard from these clients was appreciation for the convenience of the mobile clinics and the fact that its services were free. Several participants also noted that they were treated with dignity by the mobile clinic staff; something they had not always experienced when seeking health services. Suggestions for improvement included having a female physician available and having a larger exam room.

Another measure of quality, particularly for services that include HIV testing and counseling, is the quality of the laboratory and accuracy of the results. To assure laboratory quality control, the mobile clinic program sends 5 percent of all negative HIV samples and 20 percent of all positive HIV samples to a district hospital for retesting four times per year. To date, there has been 100 percent correlation between mobile clinic and reference laboratory results. Personnel from the reference laboratories also make periodic supervisory visits to the mobile

<sup>1</sup> One reason the number of HIV tests given is higher than the number of clients reported in Table 1 is that client data is generally recorded by the attending doctor and some of the mobile clinics operated without a doctor during part of the reporting period. HIV tests are recorded by the laboratory technician.

clinic to observe laboratory procedures and ensure that they comply with NACO standards.

**Costs:** The operating costs of the mobile clinics, which are paid by the NGO sub-grantees who operate them (and reimbursed by the Avert Society), include the salaries of the mobile clinic personnel, fuel, travel for training and meetings, and other costs, as outlined in Table 2.

These monthly operating costs do not include initial start-up costs, such as the purchase of the mobile clinic (approximately U.S.\$26,000 per clinic) and its equipment and supplies (about U.S.\$7,000 per clinic). Nor do they factor in the value of donated commodities, including the HIV and RPR tests, STI treatment kits, and other donated consumables.

Dividing the illustrative monthly operating costs of \$1,553 by the average number of HIV tests

<b>TABLE 2. ILLUSTRATIVE MONTHLY COSTS FOR A MOBILE CLINIC (U.S.\$)</b>	
Personnel	
Doctor	409
Counselor*	193
Lab technician†	170
Driver	114
Subtotal personnel	886
Fuel	426
Travel of project staff	45
Other	26
<b>Subtotal</b>	<b>1,383</b>
NGO contributions‡	170
<b>Total</b>	<b>1,553</b>

\* Per NACO guidelines, counselors receive a variable salary of \$148-\$227/month based on performance as measured by the number of clients counseled and tested, the percentage of clients who return for post-test counseling, and the results of a knowledge, attitudes, and skills test given every semester.

† Per NACO guidelines, lab technicians receive a variable salary of \$148-\$182/month based on performance as measured by the number of clients tested per day, the accuracy of test results compared to the reference laboratory, and the results of a written and practical test given every semester.

‡ For example, project director visits, mobile clinic parking, tax/bank charges/tolls, electricity, NGO office space, office expenses.

conducted per month in each district (455, as calculated from Table 1) yields \$3.41 per test. This cost is an overestimate, given that the number of HIV tests is underreported, as previously noted. On the other hand, if start-up costs and the value of donated tests and supplies were included, the figure would be higher. In addition, the clinics provide medical checkups and STI screening and testing and these other services should be taken into account when considering the costs and benefits of the mobile clinics.

The doctor working for the mobile clinic in Aurangabad independently analyzed the cost-effectiveness of HIV services provided by the mobile clinic in Aurangabad compared to stationary government testing and counseling centers and special field-based “camps” where government health personnel conduct testing and counseling in the community. His calculations, which include indirect costs such as client costs for travel (to government centers) and lost wages (for time attending both government centers and camps), show the cost per HIV test to be \$1.04 for a mobile clinic, \$10.93 for a field-based camp, and \$14.02 for a government testing and counseling center. If the indirect costs borne by the client are removed from the calculations, the three modalities are much closer in cost per HIV test, though the mobile clinic remains the most cost-effective.

In Kenya, a cost-effectiveness study comparing mobile- and facility-based counseling and testing services found similar results, with mobile-based testing and counseling having lower costs per client tested (Grabbe et al. 2010).

## What Has Worked Well

**NGO coordination:** Key to the success of the mobile clinic in each district is a close working relationship among the Avert Society, the NGO responsible for operating the mobile clinic and hiring



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**Truck stop in Nagpur. Long distance truckers are one group targeted by the mobile clinics.**

staff, and the NGOs that work with MARPs in each district and refer clients to the mobile clinic. It was observed that good communication and relations were present among these three entities in each district.

The monthly scheduling meetings are especially important to this coordination. The NGOs appreciate the participatory process and report that their suggestions are implemented and that the schedules reflect efforts to ensure that the mobile clinic's visits are timed to maximize convenience for their clientele.

Another example of effective coordination between the NGOs who refer clients and the NGO that operates the mobile clinic can be seen in the vicinity of the mobile clinic. As mentioned previously, the referring NGO often sets up a tent outside the mobile clinic, staffed by one of their own counselors, who hands out educational materials and talks to clients before or after their consultation inside the mobile clinic. Educational messages given in the mobile clinic are reinforced by the referring NGO and vice versa. Also, counselors from the referring NGO sometimes make home visits to provide test results to clients who do not return to the mobile clinic to receive them.

**Government support and coordination:** Coordination among the Avert Society, the

district-based NGOs, and the government is also good. There is strong government support for, and involvement with the mobile clinic program, with NACO, MSACS, and DAPCU representing the government at the federal, state, and district levels, respectively, and each playing a role. NACO established the national procedures for HIV testing and counseling that guide implementation of the mobile clinics. Most of the commodities used in the mobile clinics (including HIV test kits and STI kits) are donated by NACO through MSACS and DAPCU. Government support and coordination are also evident through the government reference laboratories that retest samples of HIV tests conducted on the mobile clinics.

Referrals from the mobile clinics to government antiretroviral therapy programs also exemplify successful coordination. This involves much more than handing a referral slip to a client who tests positive for HIV and hoping for the best. Every month, the NGO operating the mobile clinic in each district meets with the DAPCU and other stakeholders in the district. At this meeting, the mobile clinic NGO will find out whether or not all of the clients who were referred to the antiretroviral therapy clinic actually attended. If the client did not attend, or missed the six-month follow-up appointment, he or she will be contacted or visited.

**Productivity and quality:** Avert Society staff and participating NGOs stated that the mobile clinics are reaching a higher proportion of targeted populations than would be reached in their absence (as opposed to merely drawing clients away from government-run testing and counseling centers). However, this is difficult to document because of incomplete reporting by the NGOs in the mobile clinic program and the absence of pre- and post-intervention data from government testing and counseling centers, which could show whether overall numbers of clients increased after the mobile program began. In focus group discussions, NGOs and clients expressed the view that the



mobile clinics are generating new clients, primarily because of their free services and convenience. In terms of numbers of clients, the mobile clinics are seeing an average of 35 to 40 clients per day, which is reportedly higher than that of typical stationary government testing and counseling centers.

As noted under the “Results” section, the quality of the mobile clinic program appears high, both in terms of client satisfaction and the quality and accuracy of the laboratory services. Clients in particular value the convenience of the mobile clinics, the anonymity they afford, and the courteous treatment provided by staff members.

## Challenges

**Reporting:** Incomplete reporting by some of the NGOs operating the mobile clinics has been a challenge. The incomplete reporting appears to be due to a combination of factors, including staff turnover, late reporting, or failure to understand or fully complete the reporting (reporting on HIV tests, for example, but not other services provided). The Avert Society is working to address this problem by increasing monitoring visits and requesting daily reports at the conclusion of each day’s work.

**Stockouts and supplies:** The mobile clinics depend on donated commodities from the government for many of their services, including HIV and syphilis testing, STI treatment, condoms, and supplies such as syringes and gloves. The commodity that suffered recurring stockouts in 2010 was HIV rapid test kits. These are donated by the Global Fund to Fight AIDS, Tuberculosis and Malaria and distributed to the mobile clinics through NACO, MSACS, and DAPCU, making for a complicated distribution system.

Stockouts of HIV rapid tests occurred less frequently in 2011. However, mobile clinics in some districts cite it as a continuing problem. The mobile

clinic in Jalna, for example, only gets 400 to 500 kits per month, but feels it could provide up to 1,000 tests per month if the supply were increased. The Avert Society plans to request 1,000 test kits per month for all of the mobile clinics to make sure that stockouts do not occur.

**Personnel compensation and working conditions:** Both NGOs operating the mobile clinics and the mobile clinic staff themselves reported that staff salaries are low and working conditions are hard. A typical day for the doctor, counselor, lab technician, and driver who work on the mobile clinic entails arriving at the NGO office where the mobile clinic is parked during off hours; driving the vehicle (sometimes for several hours) to reach the site of the “camp” where they will provide services that day; providing services for about four hours; completing paperwork and making sure that all clients receive their test results, or will receive them through the referring NGOs; and then driving back to the NGO office. Frequently, the staff works longer than eight hours each day and staff often work evenings to be more accessible to certain client groups. The work conditions are also challenging. Staff are confined to the mobile clinic’s three small rooms. A single air conditioning unit helps, but it is insufficient to cool all three rooms and only operates if the generator is functioning.

As noted in Table 2, salaries for staff range from \$114 to \$409 per month. These salaries are low even by Indian standards but they are set by NACO, and the Avert Society does not have the authority to raise them. Doctors working in government testing and counseling centers, for example, make about 50 percent more than those working in mobile clinics. The Avert Society attributes the relatively high staff turnover they experienced during the first year of the program, especially during the first six months of the program when they lost about 70 percent of their personnel, to both low staff salaries and hard working conditions.

## Future Programming and Recommendations

NACO plans to scale-up the mobile clinic approach based on the lessons learned from the Avert Society-supported mobile clinic program. The following recommendations, therefore, are offered for consideration by NACO and the National AIDS Control Program-IV planners who may wish to incorporate mobile clinic HIV and STI service delivery to MARPs in Maharashtra or other states. Some recommendations are also intended for other implementing organizations considering the use of mobile clinics for HIV or STI services.

**Testing protocols:** The protocol for HIV and syphilis testing in the mobile clinics, which is stipulated by NACO, requires that blood be collected through venipuncture, stored in a blood collection tube, and centrifuged. The serum then must be tested for HIV using a rapid test. The same serum is used to test for syphilis using the RPR test. This process requires more time than a simple fingerstick and most mobile clinics ask the clients to return after four hours to get their results.

An alternative approach would be to do fingersticks and immediately test for HIV (rapid tests are equally accurate when using whole blood from fingersticks or serum that has been separated using a centrifuge). Another drop of blood via fingerstick could then be used to test for syphilis using one of the rapid syphilis tests available<sup>2</sup> instead of the RPR test, which requires venipuncture and separation of the serum via a centrifuge. Population Services International's Operation Lighthouse Project, supported by USAID/India from 2002 to 2006, also provided HIV testing and counseling via mobile clinics but changed their procedures to



Lab technician drawing blood in a mobile clinic in Jalna.

use fingerstick testing. They found that this change allowed them to provide test results more quickly (20 minutes versus 45 minutes when serum was collected), so that clients did not have to return later for the results. MSACS, which has four of its own mobile clinics that do HIV testing only (no STI testing), has plans to switch from collecting blood intravenously to using fingersticks.

Besides offering test results sooner, fingerstick testing can be done by lower-level personnel and does not necessarily require lab technicians. Furthermore, fingerstick testing does not require refrigeration, centrifuges, or electricity. Though electricity is available through the mobile clinic generator, a generator malfunction or lack of fuel would shut down testing.

NACO should explore this issue further and consider changing its testing protocols to allow for fingerstick testing for both HIV and syphilis (substituting the RPR test for another rapid syphilis test). The World Health Organization has produced a very useful summary of the pros and cons of RPR testing versus rapid syphilis testing (World Health Organization/Special Programme for Research and Training in Tropical Diseases 2006).

**STI treatment:** At present, clients are assessed for STIs using the syndromic management

<sup>2</sup> One such rapid syphilis test that can use whole blood is Syphicheck-WB, manufactured by Qualpro Diagnostics in Goa, India. A study carried out in Brazil found that this test, and three other similar rapid syphilis tests, had high sensitivity, specificity, and positive predictive value (Benzaken et al. 2007).

approach, complemented with RPR testing for syphilis. Treatment via prepackaged STI kits are given to all “core groups” (FSWs, MSM, TG people, and PWID) as presumptive treatment. If clients from noncore groups (migrants and truckers) have a syndrome consistent with an STI, they are given a prescription for STI medication, but not the STI kits themselves. NACO policy is to make these kits available only to core groups. This policy should be reviewed, as it seems unnecessarily restrictive. Because most of the clients who attend the mobile clinics are migrants and truckers, many of whom are at high risk for STIs, free STI kits should be made available to those who have STI syndromes. This will help the mobile clinic program increase its impact on STI prevalence in the districts while also helping to prevent HIV, given the role of STIs as cofactors in HIV transmission.

**Compensation and payments:** In view of the high turnover of staff during the first year of the mobile clinic program, the difficulty of working conditions, and feedback from program staff, program managers should consider increasing staff salaries. This is a recommendation for NACO to examine, because NACO determines the salaries of personnel in the program. Salaries should at least be equivalent to that of similar staff working in public sector testing and counseling centers.

An alternative to increasing salaries is to provide travel stipends. Unlike staff who work near their home or in an office with many amenities, mobile clinic staff must travel long distances in a vehicle that lacks the facilities to store and prepare food. This requires them to spend money at restaurants or fast food establishments. Travel stipends could minimize these out-of-pocket expenses.

**Logistics:** As noted in the “Challenges” section, stockouts of HIV rapid test kits have been a problem, though the stockouts have become less frequent. The supply of HIV test kits continues to be capped, however, at about 400 to 500 per month,

which puts a limit on the number of clients who can be tested. NACO could consider the Avert Society’s request to provide 1,000 test kits per month for each mobile clinic, though it is appropriate to subtract the stock remaining at the end of the month from the next month’s request.

Another recommendation is for NACO to consider simplifying the supply chain for donated commodities to the mobile clinics. Currently, HIV test kits, STI kits, and other consumables are distributed through MSACS and DAPCU. Several NGOs felt that the process would be more efficient and result in fewer stockouts if NACO donated the commodities directly to them instead. ■

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