case study

Expanding TB Services to the Private Health Sector in Ethiopia

1. BACKGROUND

The Private Sector Program-Ethiopia (PSP-E) is focused on increasing the capacity of private sector health care providers to deliver HIV/AIDS and tuberculosis (TB) services. Abt Associates Inc., the lead PSP-E partner, works with Population Services International, IntraHealth International, and Banyan Global to support the implementation of TB/Directly Observed Therapy–Short Course (DOTS) services in 90 private sector clinics in Addis Ababa, Amhara, and Oromia regions.

PSP-E began in October 2004 with activities primarily focused on workplace interventions. At that time, TB treatment in Ethiopia was limited to public sector health facilities. However, the Federal Ministry of Health (FMOH) had a strong interest in expanding DOTS services in line with the World Health Organization's (WHO) global recommendation to involve the private sector in the delivery of TB services (*Engaging All Health Care Providers in TB Control,* WHO, 2006). In 2003, Ethiopia's National TB Control Program Review recommended innovate approaches to increase case detection for the country, including the implementation of Public-Private Mix (PPM) for DOTS.

This expansion of services is logical given the epidemiology of TB in Ethiopia. The growth of the HIV/AIDS epidemic in Ethiopia has contributed to a significant rise in TB cases. Ethiopia has a national case detection rate of 27% (*Global Tuberculosis Control Report*, WHO 2008), and is ranked seventh in tuberculosis (TB) prevalence among high-burden countries. The FMOH has been working on multiple fronts to reduce morbidity and mortality from TB. Current efforts to control TB are aimed at achieving two global targets: detecting 70 percent of the estimated TB cases and curing 85 percent of the detected cases.

This approach is logical in the Ethiopian context – according to the *Health and Health Related Indicators* 1999 (Ethiopian calendar)

Routine reviewing of lab registers assures the quality of TB patient care

prepared by the FMOH (2006/7), the private sector is a key provider of health services in the country with 2,253 health facilities compared to 759 public sector hospitals and health centers. According to the *PPM-DOTS Implementation Guidelines* (FMOH, August 2006), 55 percent of general practitioners, 65 percent of specialists, and 79 percent of lab technicians work in the private sector. By expanding TB care to that sector, access to care will be increased, particularly for clients who are reluctant to visit public health facilities because of fear of stigma, limited hours of operation, long waits, and perception of low quality of care. Service provision at private facilities will likely reduce the patient load at crowded public facilities. Private sector health facilities, already contributing to prevention, diagnosis, and treatment services for other infectious diseases, can be provided with support to expand their services to TB diagnosis and treatment.

Key Partners

- **Federal Ministry of Health (FMOH):** The FMOH provides overall leadership for PPM, driving the policy changes required that allow private sector providers to implement DOTS. It provided the vision for piloting and later scaling up the PPM-DOTS services. The FMOH's clear direction was instrumental in setting the policy and later setting targets for expansion of PPM in the regions.
- **U.S. Agency for International Development (USAID):** In addition to serving as the donor for this project, USAID plays a critical role in providing the program with strategic direction. To strengthen PSP-E activities, USAID facilitated creation of partnerships with complementary PEPFAR collaborators. USAID also monitors PSP-E progress.
- **Regional health bureau (RHB), zonal health department, and woreda and town health offices:** Regional, zonal, woreda, and town offices of the Ministry of Health (MOH) have integrated the PPM-DOTS clinics into their supply chains for TB drugs and laboratory reagents. The offices provide supportive supervision and external quality control (EQC), incorporate the private providers into regional review meetings, collect and compile service statistics, and provide support with defaulter tracing to ensure better TB outcomes.
- **Public health facilities:** Public facilities are part of the referral system that provide a continuum of care to TB and HIV patients - patients diagnosed with TB by a private clinic may need "referral" to a public facility closer to home because of the daily visits during the intensive phase of DOTS. TB patients who test positive for HIV may also need to be referred to a public facility for antiretroviral treatment (ART) if the private clinic cannot provide ART.
- **Private clinics:** Private clinics commit to following national guidelines for TB and TB/HIV. They provide RHB-supplied TB drugs for free but are allowed to set their own fees for consultations and laboratory examinations. They report on program activities using MOH standard registers and formats, participate in meetings with their RHB and woreda health offices, and actively participate in defaulter tracing.

Definitions

Ethiopia is divided into the following political and administrative subdivisions:

Region: *Ethiopia is divided into nine ethnically based regional states and two Federal City Administrations (Addis Ababa and Dire Dawa), each with its own government directly accountable to the Federal Government.*

Zone: *Zones are subdivisions of regions with varying political and legal recognition as well as authorities.*

Woreda: *Zones are divided into woredas, an administrative division managed by a local government, equivalent to a district. Woredas are important political and administrative units with legal recognition and authority in their territories including delivery of services such as education and health, budget allocation, and management.*

City administrations: *The larger cities have city administrations, each directly accountable to their respective regional governments.*

Subcity administration: *The larger city administrations have subcities, the urban equivalent of a woreda. Addis Ababa, for instance, is divided into 10 subcities.*

Towns: *Towns are often the capitals of the woreda administrations, and have their own local government.*

Kebele: *The kebele is the smallest unit of local government in Ethiopia (urban and rural), equivalent to a neighborhood association. Kebeles are accountable to the woreda or city or subcity administrations.*

2. PROGRAM DEVELOPMENT AND IMPLEMENTATION

PSP-E rolled out the PPM-DOTS activities in phases, beginning with policy development, piloting PPM-DOTS activities in selected health facilities, and geographic scale-up. Figure 1 shows the timeline of key activities.

The key components PSP-E's PPM-DOTS program are as follows:

- Building the capacity of private sector health care providers (doctors, nurses, laboratory technicians) in TB/HIV service provision and clinic owners and managers in basic financial and human resources management
- Instituting and strengthening quality assurance systems
- Strengthening TB/HIV collaborative activities including routine HIV counseling and testing (HCT) for TB clients and referral to HIV treatment services
- Improving referral and information systems
- Strengthening drug logistics system between PPM-DOTS facilities and woreda health offices (WoHO)
- Monitoring and evaluation

By January 2009, PPM-DOTS services were being implemented in 90 health facilities in Addis Ababa, Amhara, and Oromia regions.

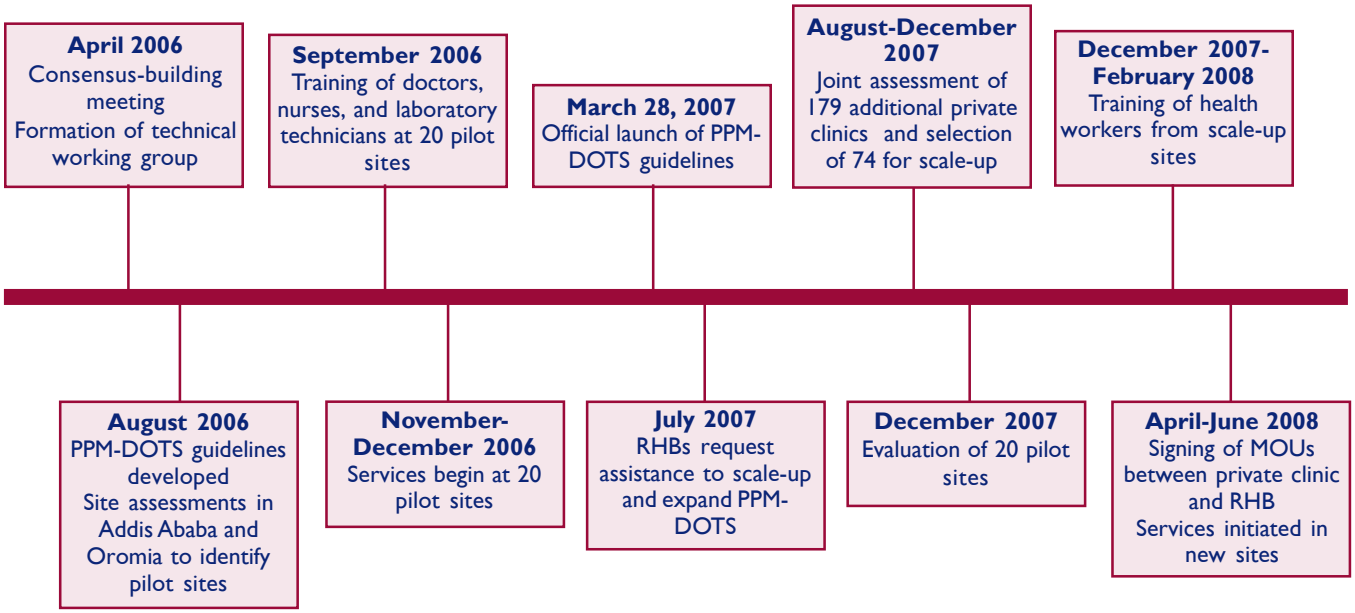
POLICY DEVELOPMENT

In 2006, PSP-E facilitated the policy process with the FMOH to extend the provision of DOTS services using a PPM model. PSP-E initiated this process by convening a consensus-building meeting that included all partners working on TB in Ethiopia in April 2006.

Following this consensus-building meeting, a technical working group was formed to guide the development of national PPM-DOTS guidelines and plan the piloting of services. Technical working group members included WHO, German Leprosy and TB Relief Association (GLRA), Medical Association of Physicians in Private Practice-Ethiopia (MAPPP-E), Drug Administration and Control Authority (DACA), Medico Legal Department, FMOH, Ethiopian Health and Nutrition Research Institute (EHNRI), and the RHBs of Addis Ababa and Oromia. MAPPP-E represented the private sector although the PPM-DOTS initiative was driven by the FMOH rather than the private sector. The technical working group developed national PPM-DOTS guidelines and selection criteria for private health facilities.

The guidelines were finalized in August 2006 and officially launched in March 2007 with a national meeting convened by the State Minister of Health to formally endorse the guidelines and call upon the regions to dramatically expand the number of PPM-DOTS sites.

FIGURE 1. TIMELINE FOR KEY PPM-DOTS ACTIVITIES



To support the activities at both the policy and implementation level, PSP-E employed and seconded a focal person to assist the National TB Control Program with developing national PPM-DOTS guidelines, assessing private sector health facilities, organizing training for selected private providers, initiating DOTS service provision, conducting quality assurance activities, evaluating the pilot phase, and designing the scale-up strategy.

PILOT PHASE

Once the national guidelines were drafted, the FMOH wanted to begin "piloting" PPM-DOTS services at selected sites. The FMOH and PSP-E decided to limit the pilot sites to clinics in Addis Ababa and Oromia, as these two places have higher numbers of private health facilities. In addition, their location facilitates close monitoring of programmatic activities by PSP-E and the FMOH. The purpose of the pilot was to:
(i) assess the potential opportunities of expanding access to DOTS coverage in the private sector; (ii) assess the willingness and ability of the private sector to deliver DOTS; and (iii) understand operational issues such as reporting, supervision, and quality related to delivering TB care.

PSP-E and the FMOH jointly assessed 25 private clinics in Addis Ababa and Oromia (medium and higher levels[1]) and selected 20 facilities (11 in Addis Ababa and 9 in Oromia) for the pilot phase based on selection criteria developed by the PPM-DOTS technical working group. PSP-E developed a standardized assessment tool (see section 3, on tools) to collect information on infrastructure, human resources, training requirements, laboratory availability, equipment, and the willingness of the owner and staff of the facility to commit to implementing PPM-DOTS services.

Selection Criteria for Private Facilities

- Facility's willingness to participate in PPM-TB and TB/HIV care: accepts training, logistics, and reporting requirements
- Ability to increase access to care for TB and TB/HIV patients: location, and socioeconomic status of clients
- Facility already has a high caseload and is therefore likely to see more TB and TB/HIV cases
- Good infrastructure: well-ventilated rooms, adequate waste disposal, etc.
- Human resources: availability of sufficient numbers of health care staff
- Availability of complementary services: HCT and other services that facilitate comprehensive care

It is important to note that the zonal, town, and woreda MOH staff were not involved during the piloting phase. According to an RHB TB focal person, *The pilot was directed by the FMOH which hindered ownership, especially among town health offices.* The different levels of the health system expressed their dissatisfaction about the lack of communication and participation to PSP-E, which raised the concerns with the FMOH. The FMOH and the project began to work much more closely with the regions and the other levels in the middle of the pilot phase.

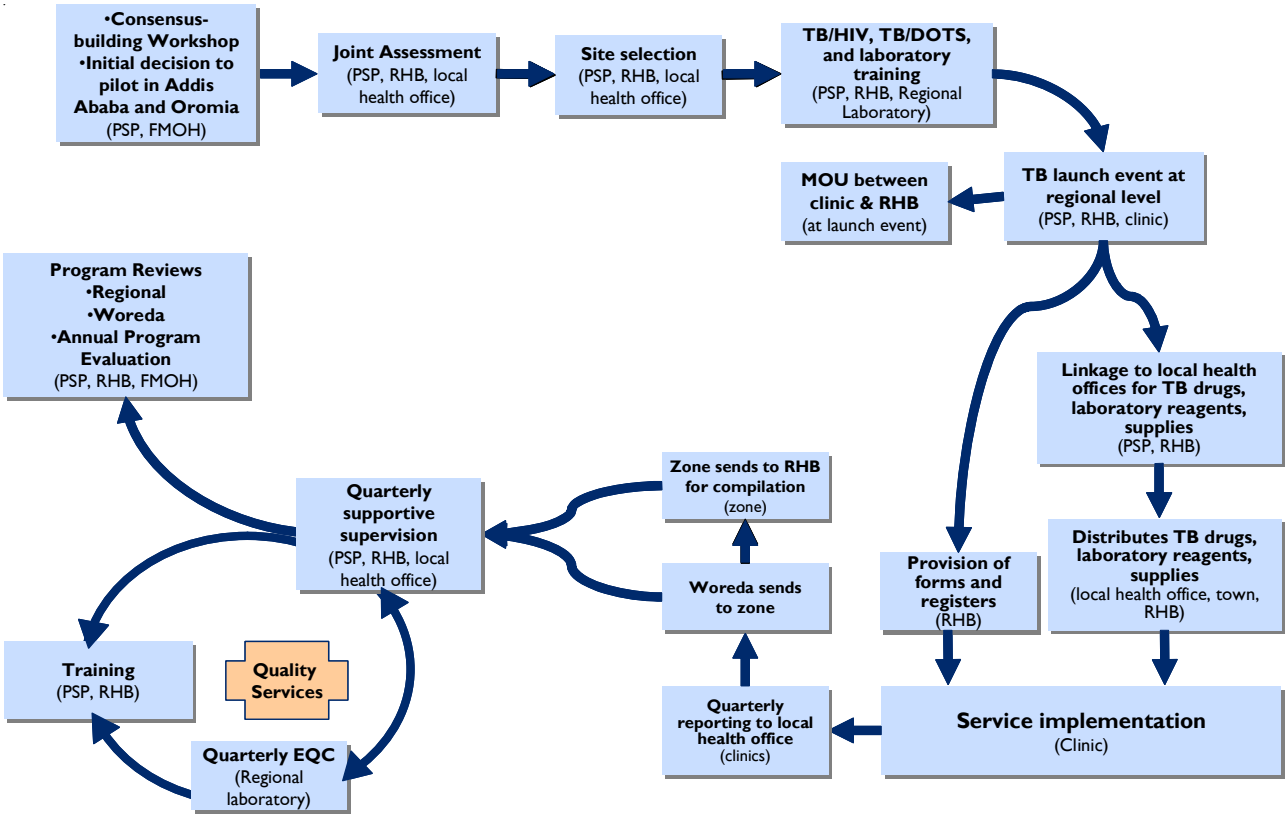
The selected facilities committed to meeting the federal government minimum requirements for delivering TB services. The requirements include a license from the respective health bureau, being geographically accessible to a large volume of clients, observing safety precautions, and possessing and adhering to national TB protocols and standards.

Following the selection, PSP-E conducted six-day integrated trainings for health care workers in TB/HIV, TB/DOTS, and provider-initiated HIV counseling and testing (PIHCT). Laboratory technicians were trained in acid-fast bacilli (AFB) and rapid HIV testing. Following the training, PSP-E and the FMOH provided formats and registers to the pilot sites and linked the private clinics to the woreda and town health offices for TB drugs, laboratory reagents, and supplies. PSP-E provided additional equipment and supplies to private clinics as needed to initiate services (e.g., face masks, weight scales, slide boxes, safety boxes for sharps disposal, and medical tray to carry sputum cups).

Implementation of PPM-DOTS services began at the 20 pilot sites in November and December 2006 following the capacity building and logistical support. Figure 2 outlines the detailed process followed to implement services at each PPM-DOTS site.

[1] *Clinics in Ethiopia are classified by their staffing. A medium clinic has one health officer, one general medical practitioner, and one laboratory technician if a laboratory is available. A higher clinic is defined as having one general practitioner or general medical practitioner head, one specialist, one nurse, one health assistant, one X-ray specialist, and one laboratory technician.*

FIGURE 2. KEY ACTIVITIES TO INITIATE AND IMPLEMENT PPM-DOTS SERVICES AT PRIVATE CLINICS



During the pilot phase, the FMOH was responsible for providing anti-TB drugs, laboratory reagents, and recording and reporting formats. By June 2007, the responsibility for supplying drugs and reagents shifted to the RHBs. The RHBs also provided supportive supervision and program monitoring. PSP-E was responsible for training providers, coordinating supervision, and reporting to the RHBs and FMOH.

A summative evaluation[2] was conducted at the end of the first year of implementation, in December 2007, to assess program performance and identify recommendations for scale-up. The key findings of the evaluation are presented below along with strategies and activities implemented by PSP-E to address the challenges the evaluation identified.

- **High staff turnover:** There is high attrition of staff trained in TB at the private health facilities. As a result, there is often inadequate staff to provide the services. To address this issue, PSP-E is implementing the following activities:
  - **Additional training sessions for doctors, nurses, and laboratory technicians** are being organized to ensure that there are new staff trained to provide TB diagnosis and treatment services.
  - To address the **human resource retention** issue, PSP staff interviewed health providers in 20 clinics and hospitals to find out about working conditions in private hospitals and clinics, and try to identify the root causes of high staff turnover. Based on this assessment, the team will bring together a diverse group of stakeholders to discuss the causes of retention and turnover. The group will also brainstorm feasible interventions to slow the turnover. A probable intervention, strongly endorsed by both providers and facility managers, is human resource management training for clinic owners and managers. One physician owner, asking for

[2] *Andualem, Wasihun, Gilbert Kombe, Abenet Leykun, and Wondwossen Assefa. February 2008. A Summative Evaluation of Pilot Sites Providing TB-DOTS Services in the Private Sector in Ethiopia. Bethesda, MD: Private Sector Program for HIV and TB-Ethiopia, Abt Associates Inc.*

ideas to keep employees on the job said, *I'm a doctor; I've never received any training on human resource management. I'm willing to learn techniques that will keep my people satisfied, and will keep them from leaving.*

- **Need for stronger involvement by the woreda health offices (WoHOs):** To sustain the TB/HIV activities, private facilities require a strong relationship with the WoHO, particularly for an ongoing supply of TB drugs and laboratory reagents. The summative evaluation found this relationship to be weak, particularly because the WoHOs were not well integrated during the pilot phase. PSP-E employed multiple strategies to strengthen this relationship:
  - The RHB, zonal, woreda, and town health officials were **involved in activity design and implementation** in the middle of the pilot phase and from the very beginning of the scale-up phase. This created a strong sense of ownership in implementation and monitoring.
  - **Joint supportive supervision** visits link staff from PSP-E with TB officers from the zonal, woreda, and/or town levels to visit PPM-DOTS clinics quarterly. PSP-E trained TB officers at the zonal, woreda, and town level in supportive supervision and the use of a detailed supportive supervision tool and are conducting ongoing joint visits with these government staff to the private clinics. (See section 3, on tools.)
  - **Memoranda of understanding (MOUs)** outlining the roles and responsibilities of each party were developed by the RHB with support from PSP-E and signed between each private clinic and their respective RHB. MOUs for the pilot facilities were signed during the scale-up phase at the launch events. (See section 3, on tools.)
  - **Advocacy workshops** have been conducted in Amhara and Oromia regions to strengthen the involvement and cooperation of zones, WoHOs, and public health facilities in supporting private clinics. The WoHO also assists private clinics with defaulter tracing as discussed in these advocacy workshops. (See section 3, on tools.)
- **Challenges with referral linkages:** Although private sites are able to diagnose and treat TB clients, there is often a need to refer clients to a DOTS facility that is closer to their home, since clients may not be able to travel to the private clinic on a daily basis for the first two months of DOTS. The evaluation found that public health facilities were not accepting clients referred by the private clinics, particularly in Amhara and Oromia. To address this issue:
  - PSP-E organized a series of **advocacy workshops** in each region to bring together representatives from public and private clinics, the WoHO, town health officials, and RHB to improve referral linkages. (See section 3, on tools.)
  - **TB launch events** were organized at the regional level for all private facilities initiating TB services to formally recognize the service following the pilot phase.
- **Low treatment success rates:** The treatment success rate was 58 percent for the 710 cases evaluated in the first year. This was due in part to a high rate of patients transferring to nearer health facilities combined with a lack of feedback from the recipient facilities on treatment outcomes. Analysis excluding the transfer cases yielded a treatment success rate of 73 percent. To increase the treatment success rates, PSP-E is implementing the following strategies:
  - To reduce the need for transfers, private clinics are continuing to diagnose TB clients but only initiating clients on TB drugs if it is clear that there will not be an imminent transfer. Clients that do need to be treated in a different site are referred before treatment is initiated. The private clinics record the information in a logbook designed to register referral information.
  - **Reporting on treatment outcome:** As a result of the advocacy workshops, regions and zones have established an agreement to report treatment outcomes back to the facility that initiated the transfer.
  - **Defaulter tracing** will be strengthened in close collaboration with the WoHOs. This issue has been raised in the advocacy workshops held in Amhara and Oromia regions. When private clinics have difficulty in tracing defaulters, the WoHO TB focal person will assist by engaging *kebele* (local government) leaders and health extension workers to assist with defaulter tracing.
- **Weak linkages between TB and HIV services:** HCT services were not being provided routinely to all TB-positive clients as per the national policy.
  - PSP-E conducted a series of trainings on basic HCT for nurses. Service providers are mentored to routinely offer HCT to all clients.

- PSP-E is working with the RHB to license facilities for HCT services in Amhara and Oromia. While awaiting licensing, HCT services are being provided with agreement by the RHB. In addition, as an interim measure, PSP-E recruited and deployed counselors to 10 facilities in Oromia to jump-start HCT services. Services are up and running and all the private facilities now have their own counselors on staff.
- The **TB unit register** has been revised at the national level to include the HIV status of each client. The previous TB unit register did not have a provision to record information on HIV testing of a patient - a column was added to include this information. Coupled with training and mentoring on PIHCT, this serves as a prompt to health workers to offer HCT to all TB clients. While awaiting printing at the national level, PSP-E obtained permission to proceed with printing and distribution of this revised register to the PPM-DOTS sites in Addis Ababa, Amhara, and Oromia.
- Private providers were trained in the **new national HIV testing** algorithm by PSP-E following a change in the national HCT guidelines. The simplified finger-prick method may facilitate provision of HCT services to TB clients.

- **Low rate of smear positive rates:** The summative evaluation revealed a smear positivity rate of 21.2 percent, which is lower than the national average. The proportion of the estimated smear-positive cases of TB detected by DOTS programs provides an indication of the effectiveness of national TB programs in finding and diagnosing people with pulmonary TB. The low positivity rate may be due to the HIV prevalence (co-infection) or inadequacy of laboratory testing (i.e., three smears are not done or poor microscopy skills).
  - To address this finding, PSP-E has distributed algorithms and standard operating procedures from the national guidelines to guide laboratory technicians.
  - During the supportive supervision visits, the importance of taking three smears is stressed and included in the action plans developed.
  - PSP-E is conducting EQC visits and blind rechecking of slides jointly with the regional laboratory to ensure adequate diagnostics, sufficient supplies, and functional microscopes to decrease the chance of false positives and false negatives.
  - PSP-E has trained additional laboratory technicians in AFB microscopy to ensure that there are enough trained staff to perform the smear microscopy procedures.

Although the summative evaluation revealed critical areas for strengthening implementation of the PPM-DOTS activities, the evaluation also revealed that the pilot sites were contributing to the case detection and treatment. In Addis Ababa, the 11 clinics alone were responsible for 15.2 percent of TB cases detected by July 2008. In addition, the FMOH and RHB recognized that the private sector had the human resources and infrastructure to provide TB diagnosis and treatment.

SCALE-UP AND GEOGRAPHIC EXPANSION

In early 2008, the project expanded to a total of 90 facilities and began work in Amhara. During the scale-up phase, RHB, zonal, woreda, and town health staff were involved in the design at all steps, creating a sense of ownership as mentioned during key informant interviews. The RHBs provided a list of 179 private facilities to be assessed for readiness and willingness to implement PPM-DOTS in Addis Ababa (33 facilities), Amhara (58), and Oromia (88). The assessment was conducted by a team of RHB, zonal, and woreda health office staff, along with PSP-E staff; it selected 74 sites using the defined selection criteria.[3] PSP-E used the process depicted in the previous section to initiate PPM-DOTS services at the additional clinics. PSP-E is currently supporting PPM-DOTS services at 90 sites in total because three of the initial pilot sites were hospitals and were transferred to Johns Hopkins University for better linkage with HIV services and one facility in Oromia closed.

Implementation of activities was easier during the scale-up due to the involvement of the different health system actors from the outset. During the scale-up phase, each private clinic (including the pilot sites) signed an MOU with the RHB. The MOU establishes a formal relationship between the RHB and private clinic and clearly articulates the roles and responsibilities of each party. (See section 3, on tools.)

[3] *Tekola, Fasil. September 2008. Site Selection Assessment of the Private Health Sector to Implement TB-DOTS Services: Addis Ababa, Amhara, and Oromia Regions, Ethiopia. Bethesda, MD: Private Sector Program-Ethiopia, Abt Associates Inc.*

Clinic Profile: Bethesaida Higher Clinic, Addis Ababa

Bethesaida Higher Clinic is located in one of the poorer and more densely populated subcities in the northern part of Addis Ababa, and is a key example of effective implementation of DOTS in the private sector. The clinic, founded by *Ato* (Mr.) Melaku Mulato in August 2006, serves approximately 25 patients per day. The facility is staffed by three physicians (two generalists and one specialist), three nurses, and two laboratory technicians. There is a room dedicated to PPM-DOTS and another dedicated to HCT.

In August 2006, a team from the FMOH and PSP-E visited Bethesaida Clinic to assess it as a potential PPM-DOTS site. The clinic met the minimum selection criteria and was therefore selected as one of the 20 pilot sites to deliver PPM-DOTS services. The clinic owner wanted to participate in the pilot in order to increase access to TB services among the poor community in the catchment area.

In September 2006, PSP-E trained a doctor and nurse in TB/HIV service provision as well as PIHCT. A laboratory technician was trained in HIV rapid testing, AFB testing, and quality assurance methods. PSP-E supplied the clinic with a TB unit register, AFB register, and technical guidelines to support service initiation. The clinic was linked to the FMOH system for laboratory consumables and TB drugs and began providing TB diagnosis and treatment services in January 2007. By September 30, 2008, the clinic had registered 238 TB patients; 101 of these cases had completed treatment at Bethesaida rather than being referred to the public sector. In addition, Bethesaida has accepted many clients who were transferred to the clinic from the very busy public health center in its catchment area.

PSP-E and the RHB conduct joint supportive supervision visits to Bethesaida to ensure the quality of services and provide onsite problem solving as needed. The results from the supportive supervision visits reveal minor problems but indicate a high quality of services. AFB slides are collected from the clinic quarterly and delivered to the regional laboratory for EQC. The EQC results reveal that the quality of testing is excellent. Feedback from a PSP supportive supervisor indicated that a reason for the success of the clinic is the high level of staff motivation. This is apparent from the high quality of patient records and reports.

Feedback from clients at the clinic is also positive. Kene, age 21, is from southern Ethiopia and moved to Addis Ababa four years ago to live with eight relatives in the catchment area of Bethesaida Clinic.

Kene started feeling sick several months ago and received a course of antibiotics as treatment from a public health center. When the treatment did not work, Kene went to another public health center and was diagnosed with TB. However, he was turned away for treatment because he did not have a kebele identity card. He came to Bethesaida Clinic after hearing about it from his colleagues and promptly began treatment. Kene has been very happy with the services at the clinic and has been coming daily for his treatment since he started one month ago.

If it hadn't been for the services here, I might have lost my life because of the seriousness of the disease, he said.

During the scale-up phase, and as a result of the summative evaluation, PSP-E introduced an action-oriented supportive supervision system for continuous quality improvement (described below in the sections on quality assurance and tools). In addition, from 2007 to 2009, the project is expanding PPM-DOTS sites to include routine HCT for all TB clients. In 2009, PSP-E will begin integrating ART services in selected facilities.

ONGOING MONITORING AND QUALITY ASSURANCE

Quality assurance and improvement is built into program implementation through routine supportive supervision and EQC on laboratory activities. As outlined in the MOU with the RHBs, the regional laboratories provide blind rechecking of AFB slides to monitor quality of laboratory results and provide timely feedback to private clinics and PSP-E. EQC was previously not practiced in the private sector. PSP-E provided slide boxes to each facility, and, each quarter, regional laboratory staff collect the slides from selected sites and conduct blind re-checking with feedback provided at the site level.

PSP-E and the RHB or local health office conduct joint supportive supervision visits using an action-oriented supervision tool to quickly identify implementation issues and define clear follow-up actions agreed to by the private clinic, WoHO, and PSP-E to resolve the identified issues. For example, when the supportive supervision team identifies problems with supply of laboratory reagents, immediate follow-up with the WoHO is conducted to remedy the problem. If the team identifies issues with submission of samples for EQC, the problem is addressed with the health facility during the site visit. In addition, the regional laboratory participates in the supportive supervision visits and provides feedback to the private clinic on EQC findings and onsite mentoring as needed.

PSP-E also organizes quarterly clinical seminars and clinical mentorship events. The purpose of this activity is to discuss complicated clinical issues, review the latest developments in TB and TB/HIV collaboration, and discuss challenges faced in achieving and maintaining the international standards for TB care and treatment.

In terms of overall quality of services, the RHB and town health office staff commented that quality was comparable, and in some ways, better than at public clinics. Dr. Degjene Dujama from the Adama Town Health Office discussed the issue of the high patient load at public TB clinics, resulting in long waiting times. He said, *Initially I had suspicion on diagnosis, treatment and follow-up on patients. Through time, I haven't seen too much difference in quality [between public and private facilities]*. Tadesse Almair, the TB/Leprosy team leader at Amhara RHB, and Dinku Dadi, head of Bishoftu WoHO in Oromia, both stated that since the standard national algorithm and guidelines were being used at public and private clinics, similar results are expected as measured against set standards.

3. TOOLS DEVELOPED TO SUPPORT THE PROGRAM

To facilitate initiation and implementation of the PPM-DOTS activities at private health clinics, PSP-E developed/adapted tools tailored to the unique needs of private clinics. The key tools used by the program are described in this section.

SITE ASSESSMENT TOOL

- **Purpose:** To assess private clinics for their readiness and willingness to implement DOTS services as part of the PPM strategy.
- **Application:** A standardized questionnaire was developed to collect information for each private clinic on current infrastructure, services (types of services, fees, guidelines), equipment and supplies, reporting and recording systems, human resources, and willingness to commit to the PPM-DOTS program. The RHB in collaboration with key partners should conduct the rapid assessment of the private health facilities' TB/HIV care. Each facility can be assessed in 1-2 hours using this simple tool. It may be reviewed prior to each round of assessments to identify any refinements that may be added.
- **Result:** The data collected are used to select sites for PPM-DOTS activities based on their readiness to implement services, as well as to tailor implementation plans to prepare each facility for service initiation.

MEMORANDUM OF UNDERSTANDING

- **Purpose:** To establish a formal relationship between the RHB and the private health facility and clearly articulate the roles and responsibilities of each party in PPM-DOTS implementation.
- **Application:** Following site selection and prior to initiation of services (ideally), the RHBs have developed an MOU to define the relationship between the RHB and private health facility in PPM-DOTS. The MOU outlines the key roles of each party. The private provider commits to following the national clinical manuals for TB and TB/HIV, provide TB drugs obtained from the MOH free of charge to patients, report on program activities following MOH systems, communicate promptly with the RHB or WoHO regarding defaulters and absentees, collect information for defaulter tracking, and participate in routine meetings with the RHB or WoHO. In turn, the RHB and WoHO agree to supply TB drugs, reagents, and other minor supplies free of charge with adequate shelf life and establish a reliable system for re-supply; provide reporting and recording formats; monitor, evaluate, and

serve as steward for the program; and establish referral relationships between public and private facilities.

- **Result:** The MOU provides a clearly defined understanding between the RHB and private health facility to guide program implementation, even in the absence of PSP-E.

SUPPORTIVE SUPERVISION TOOL

- **Purpose:** The purpose of this tool is to assist in the supervision, assessment, and creation of action plans for quality improvement as the PPM-DOTS activities expand.
- **Application:** This tool is designed to be used quarterly to assess and monitor performance, set plans for corrective action, and monitor progress over time during joint supervision visits with RHB, woreda, or town health office staff. The supervision team assesses TB diagnosis and treatment practices, including drug supply, and reviews the laboratory area and practices pertaining to TB testing and infection control. Upon completion of the assessment, the findings are reviewed immediately with the facility's TB focal person and the laboratory focal person. The tool is very practical, allowing for completion of the supervision visit within a short period of time (less than 1.5 hours). PSP-E has piloted administering the tool using handheld computers.
- **Result:** An action plan is jointly developed, reviewed, and agreed upon by the facility, government, and PSP-E staff. Specific action items are defined, noting the person responsible and deadline. The action plan is followed up throughout the quarter and reviewed during the next supportive supervision process. The data collected using the tool are entered into a database to measure performance over time.

Collecting data for supervision to private clinics

ADVOCACY WORKSHOP TO STRENGTHEN PARTNERSHIP AND REFERRAL NETWORKS BETWEEN PUBLIC AND PRIVATE HEALTH FACILITIES

- **Purpose:** The advocacy workshop aims to strengthen the partnership and referral networks between public and private clinics providing TB and/or HIV services.
- **Application:** The RHB, with support from PSP-E, has convened a series of advocacy workshops in Amhara and Oromia regions in response to issues/problems in the referral system to support TB/HIV services. The advocacy workshops bring together representatives from public and private clinics, the WoHOs, town health officials, and RHBs to make participants aware of the services provided by both public and private facilities, fostering a dialogue between facilities and establishing a referral linkage system. Laminated cards with a directory of private PPM-DOTS facilities are distributed to each public health facility for posting to increase awareness of the community and public health workers about the TB services provided at the private clinics. Defaulter tracing is discussed in the advocacy workshops to identify a collaborative solution for this issue. Private clinics will first attempt to trace defaulters using telecommunications. If this is not successful, the private provider will report defaulters to the WoHO TB focal person. The WoHO will then engage kebele leaders and community health extension workers affiliated with public health posts to assist with defaulter tracing.
- **Result:** The referral system between public and private clinics is strengthened to result in improved TB outcomes at the patient, regional, and national levels.

TRAINING CURRICULA FOR PRIVATE CLINICS

- **Purpose:** To train doctors and nurses in TB/DOTS, TB/HIV, and PIHCT and laboratory technicians in AFB and rapid HIV testing.
- **Application:** In the existing national training courses, there are three separate curricula for TB, TB/HIV, and PIHCT (three days each resulting in a total of nine days) to train doctors and nurses. There are two separate trainings (seven days in total) to train laboratory technicians in AFB and rapid HIV testing. Based on the

assessments conducted at private sector clinics, the PSP-E team identified the need to reduce the duration of these trainings while maintaining content and quality. In particular, for private clinics, it is not feasible for health care workers to be away in trainings for over one week.

PSP-E combined the three separate trainings on DOTS, TB/HIV, and PIHCT into one six-day training. The leprosy component of the DOTS training was removed from the revised curricula. By combining the three trainings, there was an automatic saving in time by reducing repetition on introductions, opening remarks, closing, and certificates. In addition, interrelated topics across the three trainings were combined (e.g., basics of HIV, TB/HIV co-infection, epidemiology of TB and HIV). For the laboratory component, PSP-E combined the two trainings for laboratory technicians into one five-day training curricula. The daily schedule for both trainings was also extended in order to cover more material in a short period of time.

The revised training courses were reviewed with the three RHBs for their buy-in and consent. The RHBs recognized that the curricula did not compromise the quality and content of the trainings and promptly approved both curricula for implementation with private providers. RHB staff participate in facilitating these trainings along with PSP-E staff.

- **Result**: As a result of the revised training curricula and PSP-E supported trainings, private providers have access to the information and skills required to implement the PPM-DOTS program.

Building the Business Management Capacity of Private Clinics for Sustainable Services

Interviews with private clinic providers revealed that many feel that providing services is their social responsibility to assist the government and increase access to services for their communities. Sister Ababa, co-owner of the Lucas Higher Clinic in Adama town, Oromia region, said, *TB is a big problem in Ethiopia and it is a moral obligation to share the burden with the government.*

As the private sector is engaged as a partner to meet public health priorities, it is important to build the financial and human resource management capacity of private clinics and help them improve access to financing. In addition, in order for public health interventions to be sustainable within the private sector, there must be a business rationale to justify these services.

In June 2007, the USAID-funded project Banking on Health identified a clear need for financial management and business training among private clinic owners. In particular, there is a specific need for training in costing and pricing services.

In response to these findings, PSP-E designed a four-day training program, "Financial Management for Clinic Managers and Owners", which trains owners to use financial information to make sound business decisions in order to operate on a sustainable and profitable scale. PSP-E is also supporting a one-day training course for private medical clinic bookkeepers and accountants to complement the training for managers. This course includes an introduction to a customized simple bookkeeping system and instructions on how to use this information to create financial reports. Pre- and post-test results indicate a 28 percent increase in knowledge by the end of the workshop for participants in both courses.

Four to six weeks after the training course for clinic managers and bookkeepers/accountants, PSP-E organizes half-day group workshop to review selected topics and provide one-to-one support to individual managers on specific issues/problems they are encountering in their practices. Topics discussed in the follow-up workshops so far have included business planning, entrepreneurship, challenges in implementing what was presented in the initial training, and discussions with a bank loan officer on lending issues.

To date, PSP-E has implemented seven training courses for each group, reaching 109 clinic managers and 105 bookkeepers and accountants. Participants consistently rate these trainings as "good" and "excellent" with comments indicating the relevance and usefulness of the content to their daily work. These trainings are supporting the sustainability of an innovative public-private partnership allowing for the provision of government sponsored TB and HIV/AIDS services and drugs through private clinics. According to Moges Alemu, Board Chairman of the Sister Aklesia Memorial Hospital, *The training was very essential for us, especially for non-professional accountants. Definitely it was eye-opening. It is essential for follow-up – before we were reluctant to get feedback from our accountants, but now we ask for information regularly.*

4. KEY ACCOMPLISHMENTS AND RESULTS

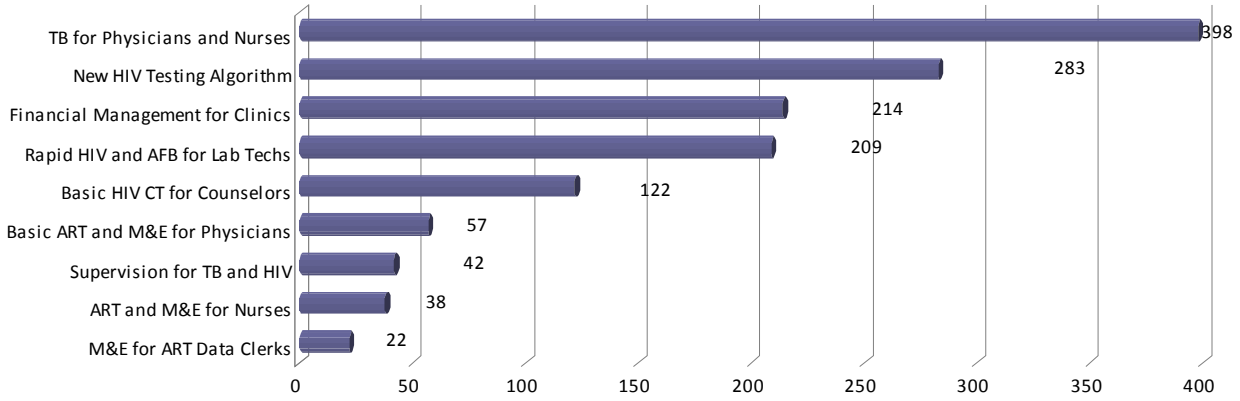
In the first two years of implementation at the 20 pilot clinics and less than one year of implementation at the scale-up clinics, the program has achieved the following results.

- **Policy formulation:** The national PPM-DOTS implementation guidelines were developed and officially launched in March 2007. These guidelines allow private health facilities to provide TB services.
- **Scale-up and geographic expansion:** PSP-E supported the scale-up of PPM-DOTS services to a total of 90 private health facilities in Addis Ababa, Amhara, and Oromia regions.
- **Training and capacity building:** Figure 3 breaks down by type of training the 1,385 private service providers that PSP-E has trained since 2006. In addition to the formal trainings PSP-E organized quarterly clinical seminars (for 110 service providers) to discuss complicated clinical issues, review the latest developments in TB and TB/HIV collaboration, and discuss challenges faced in achieving and maintaining the international standards for TB care and treatment.
- **Capacity building in financial management**: PSP-E designed a training program for private clinic owners to use financial information to make sound business decisions so that they can operate on a sustainable and profitable scale. PSP-E also supports training courses for private clinic bookkeepers and accountants to ensure that staff members responsible for bookkeeping and accounting have the tools needed to create effective financial reports. PSP-E has trained a total of 109 clinic managers and 105 bookkeepers and accountants in these areas.
- **Service delivery:** A total of 4,727 TB patients received treatment from the 90 PPM-DOTS sites supported by PSP-E. In Addis Ababa alone, the 11 PPM-DOTS pilot sites contributed to 15.2% of the cases detected and treated in the region from July 2007 to June 2008. The treatment outcomes in Addis Ababa in that period are shown in the table below:

Indicator	Percentage
Smear-positive proportion among pulmonary TB cases	31.8%
Cure rate	70.3%
Treatment success rate	76.8%
Treatment failure rate	0.0%
Defaulter rate	4.5%
Death rate	6.5%
Transfer out rate	12.3%

- **Laboratory quality:** The EQC results showed a 2.1% discordant rate (12 false positives and 14 false negatives out of 1,231 slides examined) between the results obtained by the private clinics and the verification tests conducted by the regional laboratory. The 1.99% false negative rate is lower than the national acceptance rate of 5% and the false positive rate of 2.26% is slightly higher than the nationally accepted rate of 2%.

FIGURE 3. NUMBER OF PRIVATE AND WORKPLACE HEALTH PROVIDERS TRAINED BY TYPE OF TRAINING PACKAGE (PSP-ETHIOPIA OCTOBER 2006 - DECEMBER 2008)



Providing Prompt, Quality Services to TB Clients in Addis Ababa

Elfenshe, age 65, lives with and is supported by four of her six children in Addis Ababa. She had been coming to Noble Higher Clinic for medical care for the past four years. When she started feeling ill a few months ago with coughing, night sweats, and loss of appetite, her children took her to the clinic for medical attention. *In the public sector, there are a lot of clients so there are often delays in getting service. That's why my children brought me here for prompt medical attention,* she said. Elfenshe's daughter, Meselech, agreed that the shorter and more efficient process for diagnosis and treatment was a key factor for seeking care at Noble Clinic. After Elfenshe's three sputum smears were negative, a chest X-ray revealed that she had TB. She has been on DOTS treatment for the past two months and is feeling much better: *I am no longer coughing and my appetite is better.*

Roman is a 32-year old bank worker. Her employer has an arrangement with Noble Higher Clinic, located in a busy business district in Addis Ababa. She visited Noble Clinic 15 days ago with swollen lymph nodes, and was diagnosed with extra-pulmonary TB following a biopsy and promptly put on treatment. Roman had not known about the TB services at the clinic until she saw the posters at the clinic promoting the free TB service. Roman expressed her general satisfaction with the services at the clinic. She does wish that the required daily visits during the intensive treatment phase could be reduced, but understands that they are necessary for her treatment. *I am really becoming a promoter of the services. I have been suffering for several years and have gone to other clinics but was still suffering. Here they were able to diagnose and treat me.*

5. LESSONS LEARNED

- The summative evaluation conducted at the end of the first year of the program yielded important results that were used to improve the quality of the program at the 20 pilot sites as well as lessons to apply to additional 74 private clinics.
- A high level of government commitment is critical for program success and sustainability. The high level of involvement of the FMOH during program initiation had unintended side effects in the sense that it delayed establishing the critical links between PPM-DOTS clinics and the woreda, zone, and RHB offices. However, the federal leadership in setting the course of this new initiative has been key to driving the program forward.

  Subsequently, the full participation and engagement of the government at the regional, zonal, and woreda levels was important for ongoing program implementation and scale-up. This ensures local ownership and commitment to the program.
- Ongoing capacity building and frequent contact with sites is required to identify and address staff attrition at private clinics. TB treatment is an intensive long-term service and human resource issues must be quickly identified and addressed at the facility level to ensure that services are not interrupted.
- PPM-DOTS sites have a high potential for improving national case detection and as many stakeholder's pointed out, the public sector is overwhelmed with the current patient load. There is a potential to increase the private sector's contribution to case detection through strengthening of the referral networks, promotion of the services at the current clinics, and expansion of services to additional sites. As mentioned earlier, there are 2,253 private health facilities and 759 public sector health facilities in Ethiopia. Engaging the private sector will ultimately help reduce the current burden on public health facilities.

Motivation of the Private Clinics

The private clinics selected to implement the PPM-DOTS program demonstrated a high level of motivation and commitment to providing TB treatment services. All the clinic owners interviewed viewed it as their social or moral responsibility to support these services to help their patients, community, and country. Feedback was mixed in terms of whether there was a business or financial incentive to providing TB services at the clinic. Several clinic owners pointed out that the services are time-consuming and intensive and therefore did not provide them with a significant business benefit. Dr. Damenu Tsegaye, owner of the Misiker Higher Clinic, one of the pilot sites, shared his view of the advantages of providing the services at his clinic, including from a business perspective: *There are two, three advantages. There is a moral advantage for me to provide a service for society and to help my government. By handling our patients in our clinic, we are not forcing them to run here or there. Also, financially we are earning. Since the patient is attending the clinic, they are familiar with clinic - our facility, our capacity. If any member of their family undergoes illness, they will bring them. For other health problems, they come to clinic and we charge them. So we are earning money. To summarize, the program is upgrading the popularity of the clinic.*

Engaging RHBs for Program Sustainability

Although the PPM-DOTS initiative was launched by the FMOH, the driving partners in program implementation are the RHBs of Addis Ababa, Amhara, and Oromia. The RHBs are fully engaged and committed to ensuring the success and sustainability of the program. All activities are planned in close collaboration with the RHBs – for most events, trainings, and activities sponsored by PSP-E, the RHB sends invitations and announcements from their offices. To facilitate this support, PSP-E has seconded to each RHB a technical expert who provides regular supportive supervision and quality improvement, and assists with scaling-up private sector DOTS and HCT services, improving logistics and monitoring and evaluation systems, and integrating TB/HIV services in the private sector.

All three RHBs recognize the need to engage the private sector in providing TB/DOTS. Their TB focal persons point out that government health facilities are overwhelmed and "cannot bear this burden" alone. According to Ato Dinku from the Bishoftu Town Health Office in Oromia, *The capacity of the government to diagnose and manage all TB cases is impossible. It is the responsibility of private health facilities, NGOs, and others to contribute.*

Ato Tadesse, the TB/Leprosy team leader at Amhara RHB, pointed out that *practically the majority of the community is getting services at the private sector than government. This was a missed opportunity. This will help raise our case detection.*

RHB staff mentioned that private health facilities have a comparative advantage in implementing these services. Reasons cited included the community's preference for private facilities, better diagnostic capacity at private facilities (i.e., X-ray equipment), and the availability of trained and skilled health care workers.

At the same time, RHB focal persons recognize that there are areas where private clinics need extra support, particularly defaulter tracing. *In our health facilities, in every kebele we have health agents. The treatment mechanism is through the health agents. The private facilities do not have access to the kebele health agents. They only trace using telecom.*

The RHB focal persons also commented on the issue of high staff turnover at private facilities. *We have no problem with the quality [at private clinics]. But they have staff shortages. Not one staff for TB, but one staff for many services. This may compromise quality.*

The RHBs are involved in all steps of program planning, implementation, and monitoring, from the assessment of clinics, site selection, signing of a MOU with private clinics, training, data monitoring, EQC, and supportive supervision. Sister Genet Yusef, TB expert at the Addis Ababa RHB, said, *We have good partnership from national to RHB and from RHB to PSP. We had a good partnership during scale-up, assessment, joint planning and joint supervision.* The RHBs also recognize the need for them to integrate the private sector into their routine activities. Dr. Zelalem, TB expert at Oromia RHB, stressed, *We need to own it. When we train public providers, we need to include the private providers. When we do supportive supervision, we need to supervise the private providers.*

There is a strong sense of ownership from the RHBs participating in the program. However, the RHBs expressed different levels of confidence in terms of their readiness to take over the in the near future:

- Oromia: *The RHB, zonal and woreda can take over. No problem.*
- Addis Ababa: *We need additional staff but we can take over.*
- Amhara: *We know programs started by partners are not sustainable so RHB needs to make it sustainable. We know the program is to 2009 and we have a plan to hand over. This year we are planning to expand to 20 more facilities on our own or with PSP. We are on our way with this sustainability issue.*

In addition, town health office staff pointed out that the PPM-DOTS program could lead to further collaboration with private health facilities for other health interventions: *This is also increasing the partnership between public and private health facilities. This is a clue that we can work with private health facilities in the future in other programs.*

6. NEXT STEPS

- Although there is a high level of commitment and ownership of the program by government partners at the regional, zonal, and woreda levels, the program has not yet been fully integrated into the public health system. There is a need for PSP-E to continue supporting the MOH to sustain current program activities, strengthen systems to integrate the program, strengthen linkages to public sector clinics, and transition program support activities to the public sector, particularly supportive supervision and staff trainings.
- There is a huge demand from other regions to initiate PPM-DOTS services as well as demand from Addis Ababa, Amhara, and Oromia to expand services to additional private clinics. However, there is a shortage of resources (staff, funding) for this scale-up without further donor support.
- Lessons from this program can be applied to engage the private sector in other public health priority activities, such as ART, prevention of mother-to-child transmission and pediatric HIV services, family planning, reproductive health, and malaria services.
- Continued supervision and capacity building (training, clinical seminars, and onsite mentoring) is required to address staff attrition at private clinics.
- PSP-E and the FMOH should explore and develop systems to motivate providers implementing TB diagnosis and treatment services. Since TB providers are required to work daily to support clients during the intensive phase of treatment, incentives are recommended to keep staff motivated. This could include supervision support, review meetings, and recognizing performance of providers and facilities.
- The private sector is currently not integrated into already established community systems. A strong linkage between private health clinics and community systems will need to be established to ensure treatment success, particularly in terms of defaulter tracing. PSP-E and the RHB are facilitating stronger linkages between private clinics, kebele leaders, and health extension workers to enhance case detection and defaulter tracing.
- Although the advocacy and referral networking workshops are helping to increase awareness of the PPM-DOTS services at private clinics, broader service promotion activities are needed to inform the general public about the availability of services and to create demand for these services. According to a PSP-E assessment conducted in August 2008, many people do not know that TB treatment is provided free at the government health facilities or at private clinics. Increased awareness on TB disease and treatment as well as service availability is required to increase uptake of services.
- Patient education materials to support TB services need to be developed to educate patients on TB prevention and treatment, the link between TB and HIV, benefits of HIV testing, etc. This will contribute to improvement in quality of services. PSP-E is developing or using existing information, education and communication materials focused on clients, including posters on signs and symptoms of TB, free treatment available at private facilities, TB/HIV co-infection, importance of HIV testing, and positive living messages. Private facilities will hang banners outside their clinics to promote free TB/HIV services and encourage people who have had a cough for more than three weeks to be tested. A pamphlet will be developed for TB clients focused on prevention, case detection, treatment, and HIV testing.
- PSP-E will develop job aids for providers focused on integration of TB/HIV services, TB treatment categories and regimens, and PICT.

EQC is conducted routinely at private clinics supported by PSP-E

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