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SITE SELECTION ASSESSMENT OF THE PRIVATE HEALTH SECTOR TO IMPLEMENT DOTS SERVICES: ADDIS ABABA, AMHARA, AND OROMIA REGIONS, ETHIOPIA



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ACRONYMS

AFB	Acid-fast Bacilli
AIDS	Acquired Immunodeficiency Syndrome
ANC	Antenatal Care
ART	Antiretroviral Treatment
CSA	Central Statistical Agency
DOTS	Direct Observation Therapy Short-course
ELISA	Enzyme-linked ImmunoSorbent Assay
FMOH	Federal Ministry of Health
FP	Family Planning
HC	Health Center
HCT	HIV Counseling and Testing
HIV	Human Immunodeficiency Virus
NGO	Nongovernmental Organization
OI	Opportunistic Infection
OPD	Outpatient Department
PIHCT	Provider-initiated HIV Counseling and Testing
PLHIV	People Living with HIV
PMTCT	Prevention of Mother-to-Child Transmission
PPM-DOTS	Public Private Mix for DOTS
PSP-E	Private Sector Program-Ethiopia
RH	Reproductive Health
RHB	Regional Health Bureau
SCHO	Sub-city Health Office
STI	Sexually Transmitted Infection
TB	Tuberculosis
USAID	United States Agency for International Development
WBC	White Blood Cell Count
WHO	World Health Organization
WoHO	Woreda Health Department
ZHD	Zonal Health Department

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EXECUTIVE SUMMARY

BACKGROUND

Ethiopia is a country with a high prevalence of HIV and a low tuberculosis (TB) detection rate. In recent years, Ethiopia's private health sector has received increasing consideration as a provider of TB and HIV prevention and control services. Indeed, TB and HIV control is becoming a function of a partnership between private and public health sectors. Successful control of the diseases requires high-quality medical and public health practices, political commitment, social and economic engagement, community involvement, and strengthened public-private partnership.

OBJECTIVE

This report describes a baseline assessment of private providers in terms of their service provision capacity to deliver TB/HIV services. It identifies service provision gaps in facilities planning to initiate TB/HIV services.

METHODS

The study was a cross-sectional descriptive assessment of purposively selected private health facilities. A total of 179 private health facilities were surveyed in Addis Ababa city administration, and Amhara and Oromia regions. The survey was conducted using a structured quantitative questionnaire and an observation checklist. Interviews were conducted with facility owners and health providers at each facility. In addition, review and observation of availability of registers and reporting and recording forms and the functionality of equipment and supplies was done by a team composed of personnel from the regional health bureaus, zonal health departments, the United States Agency for International Development (USAID)-funded, Abt Associates-led Private Sector Program-Ethiopia, and Management Sciences for Health-Ethiopia.

FINDINGS

The capacity of most private health facilities is mixed – they have both strengths and weaknesses. It is important to note that most facilities expressed interest and willingness to provide TB- and HIV/AIDS-related services. In terms of strengths, the majority of facilities have adequate ventilation and illuminated space or room that can be reorganized for the delivery of DOTS (Directly Observed Therapy, Short course) and HIV services. Furthermore, most are equipped with basic laboratory equipment and disinfectant solutions. Recording and regular reporting to governmental bodies varies widely by facility. For example, some facilities do not have relevant guidelines and recording and reporting forms for TB/HIV services. Weaknesses include an inadequate number of recently trained health workers on TB/HIV services, high attrition rate among trained providers, and lack of supplies for HIV diagnosis and follow-up for TB and HIV/AIDS.

CONCLUSIONS

While the availability of some basic equipment and the willingness of private providers to collaborate on TB/HIV services provision are encouraging, it is critical that the private sector take aggressive measures to improve training and retention of health workers. Private sector facilities should have access to national clinical guidelines and recording and reporting registers if they are to provide quality care. To maintain good service, stakeholders should pay attention to supportive supervision and mentoring of selected private providers, particularly at the start of the program.

I. INTRODUCTION

I.1 BACKGROUND

In sub-Saharan Africa, the dramatic spread of HIV in the past decades has been accompanied by a fourfold increase in the number of tuberculosis (TB) cases. High morbidity and mortality from TB among people living with HIV (PLHIV) makes TB case detection, treatment, and prevention a priority. The interaction between TB and HIV/AIDS has implications for TB control in areas of high HIV prevalence: Because HIV is fuelling the TB epidemic, prevention of HIV is crucial for TB control. Conversely, with TB a leading cause of morbidity and mortality in HIV-infected individuals, the management of TB is a substantial component of HIV/AIDS care.

Few countries in sub-Saharan Africa are meeting World Health Organization (WHO) targets of a 70 percent TB case detection rate and 85 percent cure rate. Achieving these goals will require scale-up of efforts to implement interventions of proven effectiveness, including countrywide coverage and full implementation of the TB-Directly Observed Therapy, Short course (DOTS) strategy, which few sub-Saharan countries currently offer. Comprehensive TB care and prevention as part of a wide-ranging HIV/AIDS care and prevention program relies on full implementation of DOTS and on other collaborative TB and HIV program activities (WHO, 2003).

Furthermore, it is essential that governmental and private health facilities and health systems collaborate to achieve the targets. Studies show that the private sector is the first point of contact for many TB patients in many countries such as India, Korea, Nepal, and the Philippines (National Council of Applied Economic Research, India [NCAER], 1995; Ministry of Health and Welfare and Korean National TB Association, 1996; WHO, 2000; Uplekar et al., 2001; Sarmiento, 1990) and that, therefore, there should be close collaboration between private practitioners and the national or regional TB control program (World Bank, 1993). Such collaboration will bring improved management of TB patients according to national guidelines. Where TB/HIV patients prefer to stay with the private practitioner for reasons of confidentiality, they will be able to do so. Private practitioners who comply with the guidelines will register their TB patients with the governmental system but share in the management of their illness. More and more countries are introducing schemes for training and accreditation of private practitioners as TB and HIV/AIDS care providers. One innovative way of involving the private sector in the provision of TB services has been the introduction of Public-Private Mix-DOTS (PPM-DOTS), which has made enormous achievements in terms of efficiency, DOTS coverage, case detection, and treatment success rates (Newell et al., 2004) as well as to policy decisions in the area of PPM-DOTS. To be successful, of course, the public-private collaboration needs coordination and commitment from all partners.

Ethiopia, with one of the lowest TB case detection rates (less than 40 percent) in sub-Saharan Africa (Federal Ministry of Health [FMOH], 2007), needs to introduce new approaches to increase community access to TB and HIV services. The FMOH has a role in policy-making, financing, and stewardship of overall program activities; as part of their routine managerial and technical functions, regional health bureaus (RHBs), zonal health departments (ZHDs), and woreda health office (WoHOs) collaborate with and give guidance to the private sector as the main partner in TB and TB/HIV control programs. Medical associations and nongovernmental organizations (NGOs) could play a major role in technically supporting the PPM activities.

The United States Agency for International Development (USAID)/Private Sector Program-Ethiopia (PSP-E) recently undertook a baseline assessment of the capacity of private health facilities in Addis Ababa, Amhara, and Oromia regions to provide TB and HIV services. The assessment entailed collection and analysis of field-level primary data and to some extent review of published documents. This report presents the findings of the assessment along with recommendations that emerged from the findings. The report focuses on issues related to human resources, range of service provision,

availability of basic equipment and supplies, availability of guidelines and protocols, health facility recording and reporting, and willingness of the private facilities to participate in TB/HIV service provision.

The rest of the report is organized as follows: objectives of the survey (part 2), methods used (part 3), findings disaggregated by region (part 4), and conclusions and recommendations (part 5). Annex tables contain extensive primary data.

2. ASSESSMENT OBJECTIVES

This main objective of this USAID-funded assessment, performed jointly by the health bureaus of Addis Ababa, Amhara, and Oromia regions of Ethiopia and the USAID PSP-E, was to establish a benchmark for the PPM-DOTS, HIV counseling and testing (HCT), and antiretroviral therapy (ART) service initiation in private health facilities in the aforementioned regions.

More specifically, it intended to:

- Assess essential programmatic inputs of the health care infrastructure of private health facilities in terms of current resources and practices;
- Identify basic structural and technical gaps in TB/HIV service delivery in the private sector;
- Recruit health facilities to commence DOTS, HCT, and ART services; and
- Use assessment findings to inform planning and scale-up of TB/HIV/AIDS services by private providers.

The findings of this benchmark assessment also will later be used to monitor and evaluate future program service delivery.

3. METHODS

3.1 SURVEY AREA

The assessment was conducted in August–December 2007 in the Addis Ababa, Amhara, and Oromia regions of Ethiopia.

- **Addis Ababa:** Addis Ababa, the capital city of Ethiopia, serves as the social, political, and economic center of the country. It is located at the geographic center of the country and covers a landmass of 540 km². The region has 30 hospitals of which 25 are private, 29 health centers, eight not-for-profit clinics, and 442 for-profit private clinics (94 special, 99 higher, 146 medium, and 103 lower).
- **Amhara region:** Amhara, in northwest Ethiopia, covers nearly 160,000 km², 13 percent of Ethiopia's total area. It is the second most populous region in the country, home to one-fourth of the country's residents, but one of the least urbanized – only 9.9 percent of its population resides in urban areas (Central Statistical Agency [CSA], 1998 EC). The region has 19 hospitals (of which two are private), 169 health centers, 69 not-for-profit clinics, and 380 for-profit private clinics (eight special, 23 higher, 71 medium, and 278 lower).
- **Oromia region:** Oromia is the largest of Ethiopia's nine regions in terms of both area and population. Its 363,007 km² cover approximately one-third of the total area of the country. Administratively, Oromia is divided into 17 zones, which are further divided into 199 woredas including 36 urban administrations (CSA, 1998 EC). The region has 30 hospitals, 202 health centers, 195 not-for-profit clinics, and 575 for-profit private clinics (seven special, 21 higher, 84 medium, and 463 lower).

Table I provides relevant background information on each of the survey areas.

TABLE I. HIV- AND TB-RELATED INDICATORS IN ASSESSMENT AREAS

Indicator	Addis Ababa	Amhara region	Oromia region
Population*	2,600,000	19,000,000	27,000,000
Annual TB case detection rate**	60%	<40%	<40%
# of HCT clients***	316,178	376,088	424,216
# of clients on ART***	22,885	18,498	16,595
# of facilities providing HCT***	159	168	227
# of facilities providing ART***	44	57	74
# of facilities providing PMTCT***	47	105	114

Sources: *CSA, 1998 EC, **FMOH 2007, ***Data are through 2007 from both public and private health facilities

Note: PMTCT=prevention of mother-to-child infection

3.2 DATA SOURCES AND STUDY DESIGN

This is a cross-sectional descriptive assessment of selected private health facilities. Data were collected in interviews with facility owners and health care providers and through a review of morbidity reports/registrations. Data collectors used a pre-structured quantitative questionnaire and observation checklist.

3.3 HEALTH FACILITY SELECTION TECHNIQUE

Selection of the participating private health facilities was purposive (non-probability). The RHBs and PSP-E jointly selected the facilities. Estimated patient flow, geographic distribution, and previous experience in the delivery of public health goods like TB/HIV were the selection criteria used. A

total of 179 (33, 58, and 88 health facilities in Addis Ababa, Amhara, and Oromia regional states, respectively) were considered for participation in the assessment.

3.4 CRITERIA FOR RECRUITMENT OF HEALTH FACILITIES

Eight variables were used to select private health facilities for future scale-up of TB/HIV/AIDS services: availability of space for DOTS; availability of space for HCT; adequacy of ventilation in the rooms; presence of appropriate number of doctors, nurses, and laboratory technicians; client load at the outpatient department (OPD) level; and commitment of the facilities to avail three or more health workers for training in TB/HIV-related topics for a period of up to three weeks.

The study selected 12 higher clinics in Addis Ababa (Annex A, Table A-1), 35 health facilities in Amhara (Annex B, Table B-1), and 40 facilities in Oromia (Annex C, Table C-1). All of the facilities fulfilled at least six of the eight selection criteria. Most of the facilities found ineligible fulfilled six or more of the criteria but were not willing to make available three or more health workers for future training, or did not have space that could be organized for DOTS or HCT, or had had a low client load at the OPD level, or did not have a nurse working in the facility on a regular basis, all criteria crucial to TB and HCT service provision. About 38 percent of facilities in Addis Ababa, 40 percent in Amhara, and 68 percent in Oromia did not meet at least six of the criteria.

3.5 ASSESSMENT TEAM

Three assessment teams did data collection. Each assessment team comprised:

- One person from the RHB (TB/HIV team, regional laboratory, and pharmacy department)
- One person from the respective ZHD
- One person from PSP-E
- One person from Management Sciences for Health-Ethiopia

4. FINDINGS

As discussed above, 179 private health facilities were surveyed for the assessment of TB and HIV services in the private health sector of the three regions in Ethiopia. Table 2 provides a breakdown of the facilities by region and level.

TABLE 2. PRIVATE FACILITIES SURVEYED, BY REGION AND LEVEL

Type of facility	Addis Ababa	Amhara region	Oromia region
General hospitals	0	2	2
Higher clinics	33	19	14
Medium clinics	0	37	72
Total	33	58	88

The following sections present assessment findings, disaggregated by region. Due to the logistical challenges of carrying out a survey of this nature, some data were not collected from all the sites visited. In these situations, the percentages given use the number of sites where data were collected as the denominator rather than the total number of sites surveyed in the region.

4.1 ADDIS ABABA CITY ADMINISTRATION

The results presented in this section are from data collected at 33 private higher clinics in Addis Ababa.

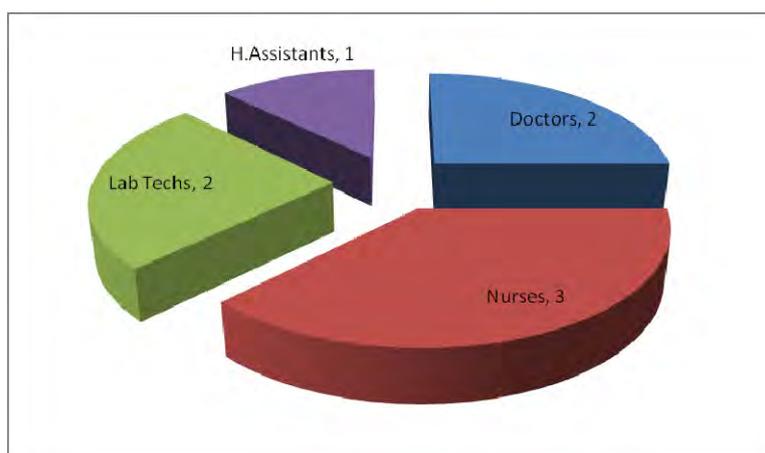
4.1.1 LICENSE TO OPERATE

Twenty-three higher clinics (69.6 percent) received a license from the Addis Ababa City Administration (ZHD) and eight (24.2 percent) received a license from the WoHO. Two (6 percent) received a license from the Addis Ababa RHB. The clinics assessed received their license to operate between 1986 and 2006; 23 received their license in the past 10 years. Thirty-one facilities have a current valid license, one has a license that is not valid, and no data were available on the license status of one facility.

4.1.2 HUMAN RESOURCES

In the 33 facilities assessed, the average staff profile was two medical doctors, three nurses, one health assistant, and two laboratory technicians. The number of full-time practicing doctors and nurses ranged from one to 10. In addition to the full-time staff, 22 (66.7 percent) of the clinics had 1–8 part-time nurses and 16 (48.5 percent) had 1–3 part-time laboratory technicians. Figure 1 and Table A-2 show the average number of health workers at each higher clinic.

FIGURE I. AVERAGE NUMBER OF HEALTH WORKERS BY CATEGORY AT THE HIGHER CLINICS, ADDIS ABABA, 2007 (N=33)



The rapid assessment explored whether the private clinic providers had received any in-service training on topics related to TB and HIV services offered during the past 12 months. The assessment indicated that less than 20 percent of the higher clinics had trained their doctors, nurses, and laboratory technicians on HCT, provider-initiated HIV counseling and testing (PIHCT), ART, and TB and TB/HIV services in the previous year. However, as shown in Table 3, the attrition rate of those trained was high. Sixty percent of doctors trained in TB (three of five) and 20 percent of trained laboratory technicians (one of five) had left the clinic in the past year. For TB/HIV, half of the trained doctors (one of two) and the one trained laboratory technician had left.

TABLE 3. NUMBER OF PRIVATE HIGHER CLINICS WITH AT LEAST ONE HEALTH WORKER TRAINED AND THE NUMBER OF FACILITIES WHERE AT LEAST ONE HEALTH WORKER HAS LEFT IN THE PAST ONE YEAR, ADDIS ABABA, 2007 (N=33)

Staff category		Percentage of facilities (number)				
		HCT	PIHCT	ART	TB	TB/HIV
Doctors	Trained	6%(2)	6% (2)	21% (7)	15% (5)	6% (2)
	Left	0	0	0	9% (3)	3% (1)
Nurses	Trained	60% (20)	15% (5)	15% (5)	21% (7)	15% (5)
	Left	0	0	0	0	0
Laboratory technicians	Trained	30% (10)	0	6% (2)	15% (5)	3% (1)
	Left	3% (1)	0	0	3% (1)	3% (1)

4.1.3 INFRASTRUCTURE OF HIGHER CLINICS

The rapid assessment included observations to assess whether the facilities have adequate space or a room for DOTS and HCT services, and whether they are well illuminated and ventilated (Table 4 and Table A-3). The assessment findings indicated that more than half of the private health facilities had rooms that are adequately illuminated. More than two-thirds had space for DOTS consultation and HCT services and over half had adequate lighting and ventilation for these services.

TABLE 4. SUITABILITY OF FACILITY INFRASTRUCTURE FOR TB/HIV SERVICES, ADDIS ABABA, 2007

Infrastructure	Number and percentage (%)
Adequate lighting* (n=25)	18 (72.0%)
Ventilation** (n=23)	16 (69.6%)
Space for DOTS*** (n=30)	24 (80.0%)
Space for HCT services (n=32)	23 (71.9%)

Note: Percentages are calculated using the denominator as the number of facilities where data were collected for each observation. The denominator may therefore vary for each indicator.

* Adequate lighting: room with light, ** Ventilation: room with windows and proper aeration, *** Space for DOTS: an adequate room/space to provide DOTS services

4.1.4 EQUIPMENT AND SUPPLIES

The rapid assessment reviewed the availability of equipment and supplies required for TB/HIV services (Table 5 and Annex A, Table A-4). As indicated, almost all of the higher clinics had microscopes, reagents for TB, and a refrigerator. Twenty-three facilities had HIV test kits available at the time of the assessment. However, only a few facilities had supplies for diagnosis of HIV and follow-up of patients on ART (for example, only 9.1 percent have a CD4 counter and 24.0 percent have an enzyme-linked immunosorbent assay [ELISA] machine).

TABLE 5. AVAILABILITY OF FUNCTIONING EQUIPMENT AND SUPPLIES IN THE HEALTH FACILITY, ADDIS ABABA, 2007

Equipment/Supply	Number and percentage (%)
Microscope (n=31)	31 (100.0%)
HIV test kits (n=31)	23 (74.2%)
Reagents for TB (n=32)	30 (93.8%)
Refrigerator (n=31)	31 (100.0%)

Note: Percentages are calculated using the denominator as the number of facilities where data were collected for each observation. The denominator may therefore vary for each indicator.

The rapid assessment reviewed the availability of relevant items for infection prevention and universal precaution at the 33 clinics. Almost all the clinics had disinfectant solutions and clean and sterile gloves. However, nearly half did not have face masks, aprons, and safety boxes for safe sharps disposal. About 85 percent of the clinics had an incinerator and septic tank for safe liquid waste disposal.

4.1.5 SERVICE PROVISION

Types of services rendered

Thirty of the 33 private higher clinics assessed provided inpatient services. Of these facilities, 21 (70.0 percent) had 1-5 beds and nine (30.0 percent) had 6-10 beds.

Thirty-two clinics provided laboratory services, 25 provided opportunistic infection (OI)/sexually transmitted infection (STI) services and 23 provided HCT services. However, less than half offered most packages of family planning (FP)/reproductive health (RH) services, services related to TB and HIV such as ART (0.0 percent), PMTCT (0.0 percent), and TB diagnosis and treatment (40.6 percent) (Table 6 and Annex A, Table A-5). Among the 23 higher clinics that offered HCT services, more than two-thirds had posted the HCT protocol and cue cards, offered audio-visual privacy and condoms, and had a penile model available.

TABLE 6. RANGE OF SERVICES PROVIDED BY THE PRIVATE HIGHER CLINICS, ADDIS ABABA, 2007

Service	Number and percentage (%)
HCT (n=33)	23 (69.7%)
ART (n=33)	0 (0.0%)
OI/STI (n=33)	25 (75.8%)
PMTCT (n=32)	0 (0.0%)
TB diagnosis and treatment (n=32)	13 (40.6%)
Maternal health (n=31)	10 (32.3%)
Family planning/Reproductive health (n=31)	15 (48.4%)
Child health (n=33)	13 (39.4%)
ANC (n=33)	13 (39.4%)
Laboratory (n=33)	32 (97.0%)

Note: ANC=antenatal care.

Percentages are calculated using the denominator as the number of facilities where data were collected for each indicator. This denominator may therefore vary for each indicator.

Laboratory tests conducted

Almost all the private higher clinics conducted white blood cell (WBC) count, hemoglobin/hematocrit tests, and acid-fast bacilli (AFB) tests (Table 7). In contrast, only 15.2 percent and 9.1 percent conducted a CD4 count and viral load, respectively.

TABLE 7. LABORATORY TESTS CONDUCTED IN THE PRIVATE HIGHER CLINICS, ADDIS ABABA, 2007

Lab test	Number and percentage (%)
WBC count (total and differential)	32 (97.0%)
Hemoglobin/hematocrit	32 (97.0%)
Platelet count	19 (57.6%)
AFB	31 (93.9%)
HIV rapid test	23 (69.7%)

Client load

At the 31 clinics with data available on patient load, the median number of clients seen per week at the OPD was 120 (range: 15–700) (Annex A, Table A-6). The median number of HCT clients and TB cases treated as an OI was 20 and three, respectively.

4.1.6 GUIDELINES AND PROTOCOLS

Generally, guidelines and protocols to guide quality service provision were not available in the private higher clinics in Addis Ababa (Table 8 and Annex A, Table A-7).

TABLE 8. GUIDELINES AND PROTOCOLS FOR PROVISION OF SERVICES IN PRIVATE HIGHER CLINICS, ADDIS ABABA, 2007

Guideline/Protocol	Number and percentage (%)
TB (n=29)	14 (48.3%)
TB/HIV (n=28)	8 (28.6%)
HCT (n=27)	13 (48.1%)
ART (n=27)	5 (18.5%)
STI (n=26)	2 (7.7%)
Management of HIV and OI (n=26)	2 (7.7%)
PIHCT (n=26)	2 (7.7%)
AFB and rapid HIV test (n=26)	2 (7.7%)

Note: Percentages are calculated using the denominator as the number of facilities where data were collected for each observation. The denominator may therefore vary for each indicator.

4.1.7 RECORD KEEPING, REPORTING, AND SUPERVISION

More than half of clinics had the basic lab request forms, hospital referral form, HCT register, and TB patient transfer and referral form available (Table 9 and Annex A, Table A-8). Most of the facilities lacked recording and reporting forms related to TB and HIV – only eight had TB registers and one had TB/HIV forms. Five facilities had their own data clerk. However, data were regularly recorded and compiled by 28 (84.8 percent) health facilities. Thirty-two clinics send their reports to the RHB or sub-city health office (SCHO). Out of the 31 clinics that send their report to the SCHO, 29 do it monthly and two do it quarterly. One clinic reports to the RHB on a quarterly basis. All of the higher clinics received supervision from responsible governmental bodies, primarily from the SCHO.

TABLE 9. AVAILABILITY OF RECORDING AND REPORTING FORMS BY THE PRIVATE HIGHER CLINICS, ADDIS ABABA, 2007 (N=33)

Form	Number and percentage (%)
Basic lab request form	29 (87.9%)
Hospital referral form	29 (87.9%)
HCT registers	21 (63.6%)
TB registers	8 (24.2%)
TB patient transfer and referral form	18 (54.5%)
TB/HIV forms	1 (3.0%)

4.1.8 WILLINGNESS TO PARTICIPATE IN TB/HIV CARE

Researchers assessed the willingness of the private health facilities to handle logistics for TB service provision, and the willingness to make health workers available for training (Annex A, Table A-9). Seventeen are able to handle logistics for PPM-DOTS and 24 expressed willingness to make at least three health workers available for a two-round training. Fourteen clinics already had staff who are trained and can be assigned to provide DOTS.

TABLE 10. WILLINGNESS OF THE PRIVATE HIGHER CLINICS TO PARTICIPATE IN TB AND HIV CARE, ADDIS ABABA, 2007 (N=33)

Activity	Number and percentage (%)
Are willing to avail ≥ 3 health providers for training (n=24)	23 (95.8%)
Have staff who are trained and can be assigned to provide DOTS (n=25)	14 (56.0%)
Reported they are able to handle logistics for PPM-DOTS (n=21)	17 (81.0%)

Note: Percentages are calculated using the denominator as the number of facilities where data were collected for each observation. The denominator may therefore vary for each indicator.

4.1.9 AMHARA REGION

The results presented in this section are from data collected at 58 private health facilities in the Amhara region: two general hospitals, 19 higher clinics, and 37 medium clinics.

4.1.10 LICENSE TO OPERATE

Both general hospitals and about three-fourths of the higher clinics were granted licenses to operate by the RHB. The remaining quarter of higher clinics received their license from the WoHO. With the exception of one medium clinic that had received its license from the ZHD, the medium clinics received their license from the WoHO. All facilities received their license in the period 1987–2007. Thirty-three (57 percent) of them received a license in the past 10 years. Fifty-one (87.9 percent) of the facilities assessed have a current valid license.

4.1.11 HUMAN RESOURCES

The average staff profile of a private health facility of any level of care in Amhara region included one medical doctor, two nurses, one health assistant, one laboratory technician, and one pharmacy technician (Table 11). (Annex B, Table B-2 shows more specific data.) The number of full-time practicing doctors and nurses per facility showed wider variation than did the other health professional categories. The number of health workers decreases with the level of facility (general hospital to higher clinic to medium clinic). In addition to the full-time staff, four (6.9 percent) of the facilities had part-time health officers, 21 (36.2 percent) had part-time nurses, and 17 (29.3 percent) had part-time laboratory technicians. The number of part-time staff at each health facility ranged from one to six.

TABLE 11. AVERAGE NUMBER OF HEALTH WORKERS BY CATEGORY AND TYPE OF HEALTH FACILITY, AMHARA REGION, 2007

Staff category	General hospital	Higher clinic	Medium clinic	Average
Doctors	5	2	1	1
Nurses	9	2	1	2
Lab technicians	3	2	1	1

The rapid assessment explored whether the private health service providers had received any in-service training on topics related to TB and HIV services offered during the past 12 months. Table 12 shows that few health workers were trained in PIHCT, ART, TB, and TB/HIV in the past year. Although 61 health workers were trained in HCT, this represents only one-quarter of facilities. Furthermore, 17.8 percent of laboratory technicians trained in HCT in the past year have left their facility.

TABLE 12. PERCENTAGE OF HEALTH FACILITIES WITH AT LEAST ONE HEALTH WORKER TRAINED AND LEFT THE FACILITY IN THE PAST ONE YEAR, AMHARA REGION, 2007 (N=58)

Staff category		Percentage of facilities (number)				
		HCT	PIHCT	ART	TB	TB/HIV
Doctors	Trained	12% (7)	3% (2)	12% (7)	0	2% (1)
	Left	0	0	0	0	0
Nurses	Trained	21% (12)	2% (1)	2% (1)	2% (1)	0
	Left	0	0	0	0	0
Laboratory technicians	Trained	28% (16)	0	0	9% (5)	0
	Left	5% (3)	0	0	0	0

4.1.12 INFRASTRUCTURE OF HEALTH FACILITIES

Of the health facilities assessed, 52 (89.7 percent) had space for DOTS consultation and 43 (78.2 percent) had space for HCT services (Table 13 and Annex B, Table B-3). Data collected indicated that more than 90.0 percent of the facilities had rooms that were adequately illuminated and ventilated.

TABLE 13. SUITABILITY OF FACILITY INFRASTRUCTURE FOR TB/HIV SERVICES, BY TYPE OF HEALTH FACILITY, AMHARA REGION, 2007

Type of facility	Number and percentage			
	Adequate lighting (n=58)	Ventilation n=58)	Space for DOTS (n=58)	Space for HCT services (n=55)
General hospital	2 (100.0%)	2 (100.0%)	2 (100.0%)	2 (100.0%)
Higher clinic	13 (68.4%)	15 (78.9%)	19 (100.0%)	18 (94.7%)
Medium clinic	34 (91.9%)	34 (91.9%)	31 (83.8%)	23 (62.2%)
Total	49 (84.5%)	51 (87.9%)	52 (89.7%)	43 (78.2%)

Note: Percentages are calculated using the denominator as the number of facilities where data were collected for each observation. The denominator may therefore vary for each indicator.

4.1.13 EQUIPMENT AND SUPPLIES

Although it is possible to offer health services under a variety of conditions, there are certain infrastructure and health system components that are believed to encourage and support a consistent level of quality and appropriate utilization of health services. The majority of health facilities had reagents for TB, a refrigerator, and a microscope. In contrast, relatively few facilities had supplies for diagnosis of HIV and follow-up of patients on ART (Table 14 and Annex B, Table B-4).

TABLE 14. AVAILABILITY OF FUNCTIONING EQUIPMENT AND SUPPLIES, BY TYPE OF HEALTH FACILITY, AMHARA REGION, 2007

Type of facility	Number and percentage that have			
	Microscope (n=56)	HIV test kits (n=55)	Reagents for TB (n=56)	Refrigerator (n=56)
General hospital	2 (100.0%)	2 (100.0%)	2 (100.0%)	2 (100.0%)
Higher clinic	19 (100.0%)	11 (61.1%)	18 (94.7%)	19 (100.0%)
Medium clinic	35 (100.0%)	7 (20.0%)	32 (91.4%)	30 (85.7%)
Total	56 (100.0%)	20 (36.4%)	52 (92.9%)	51 (91.1%)

The rapid assessment reviewed the availability of relevant items for infection prevention and universal precaution at the 58 facilities. Fifty-six facilities (96.6 percent) had disinfectant solutions and clean and sterile gloves. However, two-thirds did not have facemasks, aprons, and safety boxes for safe sharps disposal. About 60 percent of the facilities had an incinerator and septic tank for safe liquid waste disposal.

4.1.14 SERVICE PROVISION

Types of services rendered

Inpatient services were provided at 46 (79.3 percent) of the 58 private health facilities assessed. Disaggregated analysis by level of health facility showed that all general hospitals and higher clinics provide inpatient services, compared with two-thirds of the medium clinics. Of the facilities providing inpatient services, 70.2 percent had 1-5 beds, 19.1 percent had 6-10 beds, and 10.6 percent had more than 10 beds. The number of rooms in OPDs also varied by level of facility. Both general hospitals had six rooms or more; the majority of higher clinics (65.0 percent) and medium clinics (91.0 percent) had fewer than three rooms.

The majority of private health facilities offer most packages of FP/RH services. However, only a few provided services related to TB and HIV such as HCT (41.1 percent), ART (0.0 percent), PMTCT (1.8 percent), and TB diagnosis and treatment (22.0 percent) (Table 15 and Annex B, Table B-5). Among the 23 (41.1 percent) health facilities that offered HCT services, 38.1 percent have posted the HCT protocol, 59.1 percent had audio-visual privacy, and 45.5 percent had condoms. However, the counseling room of only 27.3 percent had cue cards, and 18.2 percent had a penile model.

TABLE 15. RANGE OF SERVICES PROVIDED BY THE HEALTH FACILITIES, AMHARA REGION, 2007

Type of facility	Number and percentage that provide									
	HCT (n=56)	ART (n=56)	OI/STI (n=55)	PMTCT (n=56)	TB (n=50)	Maternal health (n=52)	FP/RH (n=53)	Child health (n=53)	ANC (n=53)	Lab (n=53)
General hospital	2 (100.0%)	0 (0.0%)	2 (100.0%)	0 (0.0%)	0 (0.0%)	2 (100.0%)	2 (100.0%)	2 (100.0%)	2 (100.0%)	2 (100.0%)
Higher clinic	13 (68.4%)	0 (0.0%)	14 (73.7%)	1 (5.3%)	4 (25.0%)	10 (55.6%)	15 (78.9%)	15 (78.9%)	18 (94.7%)	19 (100.0%)
Medium clinic	8 (22.9%)	0 (0.0%)	17 (50.0%)	0 (0.0%)	7 (21.9%)	20 (62.5%)	30 (93.8%)	29 (90.6%)	25 (78.1%)	32 (100.0%)
Total	23 (41.1%)	0 (0.0%)	33 (60.0%)	1 (1.8%)	11 (22.0%)	32 (61.5%)	47 (88.7%)	46 (86.8%)	45 (84.9%)	53 (100.0%)

Note: Percentages are calculated using the denominator as the number of facilities where data were collected for each observation. The denominator may therefore vary for each indicator.

Laboratory tests conducted

Nearly 95 percent of the health facilities conducted a AFB and most did a WBC count and hemoglobin/hematocrit tests (Table 16). None of the facilities conducted a CD4 count and viral load.

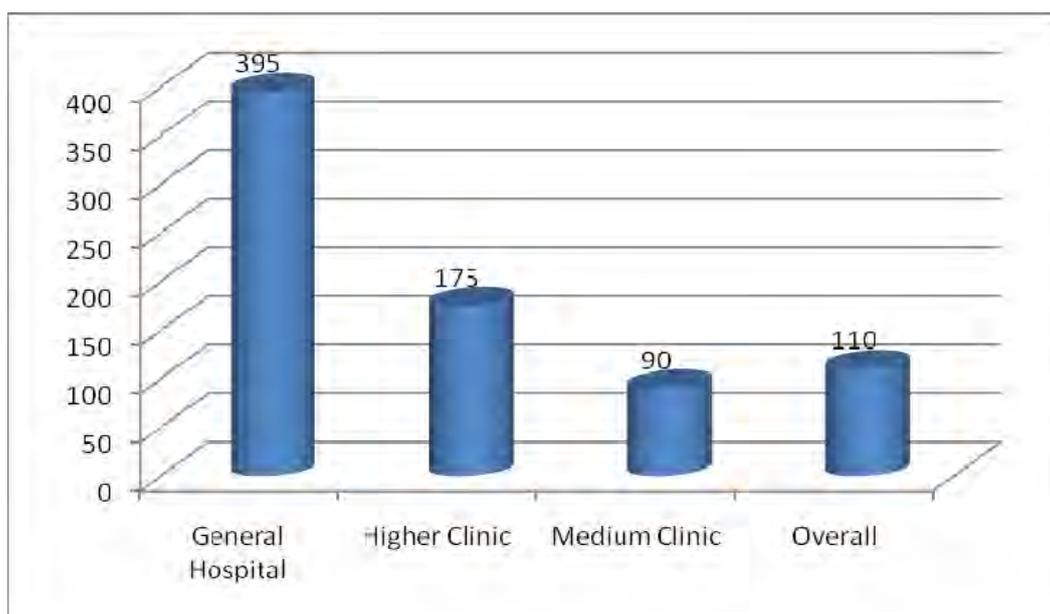
TABLE 16. LABORATORY TESTS CONDUCTED IN THE HEALTH FACILITIES, AMHARA REGION, 2007

Type of facility	Number and percentage that conduct				
	WBC count	Hgb/ Hct	Platelet count	AFB	HIV rapid test
General hospital (n=2)	2(100.0%)	2(100.0%)	1(50.0%)	2(100.0%)	2(100.0%)
Higher clinic (n=20)	20(100.0%)	20(100.0%)	7(35.0%)	20(100.0%)	13(65.0%)
Medium clinic (n=36)	31(86.1%)	30(83.3%)	5(13.9%)	33(91.7%)	7(19.4%)
Total (n=58)	53(91.4%)	52(89.7%)	13(22.4%)	55(94.8%)	22(37.9%)

Client load

At the 57 facilities with data available on patient load, the median number of clients seen per week at the OPD was 110 (range: 4–980). The average number of HCT clients and TB cases treated as an OI was 35 and seven, respectively. More detail is presented in Figure 2 and Annex B, Table B-6.

FIGURE 2. AVERAGE NUMBER OF OPD CLIENTS SEEN PER WEEK AT THE HEALTH FACILITY, AMHARA REGION, 2007



4.1.15 GUIDELINES AND PROTOCOLS

Approximately 60 percent of the health facilities had guidelines on TB diagnosis and management. However, most of them did not have guidelines and protocols for HIV-related services like HCT, ART, PIHCT, and AFB. Surprisingly, none of these guidelines were available in the general hospitals (Table 17 and Annex B, Table B-7).

TABLE 17. GUIDELINES AND PROTOCOLS FOR PROVISION OF SERVICES, AMHARA REGION, 2007

Type of facility	Number and percentage that have guideline/protocol on							
	TB (n=49)	TB/HIV (n=49)	HCT (n=46)	ART (n=48)	STI (n=47)	Management of HIV & OI (n=47)	PIHCT (n=46)	AFB & rapid HIV test (n=45)
General hospital	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Higher clinic	10 (58.8%)	7 (41.2%)	5 (33.3%)	4 (25.0%)	8 (47.1%)	6 (35.3%)	3 (18.8%)	5 (33.3%)
Medium clinic	19 (61.3%)	7 (22.6%)	4 (12.9%)	4 (12.9%)	13 (44.8%)	4 (13.8%)	2 (6.9%)	10 (34.5%)
Total	29 (59.2%)	14 (28.6%)	9 (19.6%)	8 (16.7%)	21 (44.7%)	10 (21.3%)	5 (10.9%)	15 (33.3%)

Note: Percentages are calculated using the denominator as the number of facilities where data were collected for each observation. The denominator may therefore vary for each indicator.

4.1.16 RECORD KEEPING, REPORTING, AND SUPERVISION

Eleven (19.0 percent) facilities had their own data clerk (Annex B, Table B-8). Observations by data collectors indicated that data were regularly recorded and compiled by 42 (72.4 percent) of the 58 health facilities surveyed. Thirty-eight (65.5 percent) were sending their reports to the ZHD or WoHO. Of the 37 clinics that send their report to the ZHD, nine (24.3 percent) were sending the report monthly and 28 (75.7 percent) were sending it quarterly. One health facility was sending it to

the WoHO on a quarterly basis. Most (82.8 percent) of the health facilities receive supervision from responsible governmental bodies. Table 18 provides a breakdown of the availability of forms and registers at the facilities assessed.

TABLE 18. AVAILABILITY OF DIFFERENT TYPES OF RECORDING AND REPORTING FORMS BY TYPE OF HEALTH FACILITY, AMHARA REGION, 2007

Type of facility	Percentage that have					
	HCT registers	TB registers	TB patient transfer & referral form	TB/HIV forms	Basic lab request form	Hospital referral form
General hospital (n=2)	100.0	0.0	0.0	0.0	100.0	100.0
Higher clinic (n=19)	52.9	5.9	56.3	13.8	94.1	94.1
Medium clinic (n=37)	15.2	0.0	41.2	8.8	82.4	78.1
Total (n=58)	30.8	1.9	44.2	9.8	86.8	84.3

4.1.17 WILLINGNESS TO PARTICIPATE IN TB/HIV CARE

The assessment reviewed the willingness of the private health facilities to implement TB and HIV care. The analysis indicated that 53 (96.4 percent) of the facilities were willing to make at least three health workers available for a two-round training, and 44 (81.5 percent) reported they were able to handle logistics for PPM-DOTS (Table 19 and Annex B, Table B-9).

TABLE 19. WILLINGNESS OF THE PRIVATE HEALTH FACILITIES TO PARTICIPATE IN TB AND HIV CARE, AMHARA REGION, 2007

Type of facility	Number and percentage (%) that		
	Are willing to avail ≥ 3 health providers for training (n=55)	Have staff who are trained and can be assigned to provide DOTS (n=49)	Reported they are able to handle logistics for PPM-DOTS (n=54)
General hospital	2 (100.0%)	2 (100.0%)	2 (100.0%)
Higher clinic	19 (100.0%)	0 (0.0%)	16 (84.2%)
Medium clinic	32 (94.1%)	1 (3.2%)	26 (78.8%)
Total	53 (96.4%)	3 (6.1%)	44 (81.5%)

Note: Percentages are calculated using the denominator as the number of facilities where data were collected for each observation. The denominator may therefore vary for each indicator.

4.2 OROMIA REGION

The results presented in this section are from data collected at 88 private health facilities in the Oromia region: two general hospitals, 15 higher clinics, and 71 medium clinics.

4.2.1 LICENSE TO OPERATE

The majority (79.1 percent) of the health facilities surveyed received their license from the ZHD. Only four health facilities (all medium clinics) were granted license to operate from the WoHO. Both general hospitals and the majority of higher clinics (84.6 percent) received their license from the RHB. The 88 health facilities have been operating over a range of 22 years (1985–2007). Nearly 70 percent received their license to operate in the 10 years between 1997 and 2007. Currently, 75 (85.2 percent) of the facilities have a valid license to operate.

4.2.2 HUMAN RESOURCES

In the 88 facilities assessed, the average staff profile was one medical doctor, one nurse, one health assistant, one laboratory technician, and one pharmacy technician. In addition to the full-time staff, 35 facilities (39.8 percent) had part-time nurses and 22 facilities (25.0 percent) had part-time laboratory technicians. None of the private health facilities employed part-time doctors, health officers, or clinical specialists. The number of part-time staff at each health facility varied between one and three for nurses and between one and two for laboratory technicians. Table 20 and Annex C, Table C-2, show the average number of health workers at each health facility disaggregated by level of service.

TABLE 20. AVERAGE NUMBER OF HEALTH WORKERS BY CATEGORY AT VARIOUS LEVELS OF HEALTH FACILITIES, OROMIA REGION, 2007

Staff category	General hospital	Higher clinic	Medium clinic	Lower Clinic	Average
Doctors	2	2	2	1	1
Nurses	7	2	2	1	1
Lab technicians	2	2	2	1	1

The assessment explored whether private health service providers received any in-service training on topics related to TB and HIV services offered during the past 12 months. Table 21 shows the proportion of health facilities with at least one health worker of a specified category trained on a specific topic. It can be concluded that there was a considerable gap in training of health workers on HCT, PIHCT, ART, TB, and TB/ HIV in all health worker categories in the previous one year. Furthermore, the attrition rate of doctors and nurses who had been trained on PIHCT, HCT, and ART in the same year was considerable.

TABLE 21. PROPORTION OF HEALTH FACILITIES WITH AT LEAST ONE HEALTH WORKER TRAINED AND LEFT THE FACILITY IN THE PAST ONE YEAR (N=88), OROMIA REGION, 2007

Staff category		Percentage of facilities (number)				
		HCT	PIHCT	ART	TB	TB/HIV
Doctors	Trained	5%(4)	6%(5)	8%(7)	1%(1)	1%(1)
	Left	0	2% (2)	0	0	0
Nurses	Trained	6%(5)	6%(5)	1%(1)	2%(2)	1%(1)
	Left	1%(1)	0	0	0	0
Laboratory technicians	Trained	6%(5)	2%(2)	0	1%(1)	1%(1)
	Left	1%(1)	0	0	0	0

4.2.3 INFRASTRUCTURE OF THE HEALTH FACILITIES

The data collectors observed the presence of a room or space that can be reorganized for delivering DOTS services and HCT for HIV. Observations were also done to assess whether the rooms are adequately ventilated and illuminated. The assessment indicated that 76 out of the 88 (86.4 percent) of the health facilities were well illuminated and all facilities were well ventilated. In addition, 79.5 percent and 72.4 percent of the health facilities had space that can be reorganized to deliver DOTS services in the future (Table 22 and Annex C, Table C-3).

TABLE 22. SUITABILITY OF FACILITY INFRASTRUCTURE FOR TB/HIV SERVICES, OROMIA REGION, 2007

Type of facility	Adequate lighting	Ventilation	Space for DOTS	Space for HCT services
General hospital (n=2)	1 (50%)	2 (100%)	2 (100%)	2 (100%)
Higher clinic (n=15)	11 (73.3%)	15 (100%)	12 (80%)	15 (100%)
Medium clinic (n=71)	64 (90.1%)	71 (100%)	56 (78.9%)	47 (66.2%)
Total (n=88)	76 (86.4%)	88 (100.0%)	70 (79.5%)	64 (72.7%)

4.2.4 EQUIPMENT AND SUPPLIES

The majority of health facilities had reagents for TB (97.7 percent), a refrigerator (90.9 percent), and a microscope (98.9 percent). In contrast, only a small number of facilities had supplies for diagnosis of HIV (such as HIV test kits and ELISA machine) and none had a CD4 count machine, useful for follow-up of patients on ART (Table 23 and Annex C, Table C-4).

TABLE 23. AVAILABILITY OF FUNCTIONING EQUIPMENT AND SUPPLIES BY TYPE OF HEALTH FACILITY, OROMIA REGION, 2007

Type of facility	Number and percentage* (%) that have			
	Microscope (n=88)	HIV test kits (n=78)	Reagents for TB (n=87)	Refrigerator (n=88)
General hospital	2 (100.0%)	0 (0.0%)	1 (100.0%)	2 (100.0%)
Higher clinic	15 (100%)	4 (28.6%)	15 (100%)	14 (93.3%)
Medium clinic	70 (98.6%)	6 (9.5%)	69 (97.2%)	64 (90.1%)
Total	87 (98.9%)	10 (12.8%)	85 (97.7%)	80 (90.9%)

Note: Percentages are calculated using the denominator as the number of facilities where data were collected for each observation. The denominator may therefore vary for each indicator.

Almost all of the assessed health facilities had disinfectant solutions and clean and sterile gloves. In contrast, about two-thirds did not have face masks, three-fourths did not have safety boxes for sharps disposal, nearly half did not have an incinerator, and two-thirds did not have septic tank for safe liquid waste disposal.

4.2.5 SERVICE PROVISION

Types of services rendered

Of the 88 private health facilities surveyed, 60 (68.2 percent) provided inpatient services. Disaggregated analysis by facility showed that all general hospitals and higher clinics provided inpatient services, while just over 60 percent of the medium clinics did. Of the facilities with inpatient beds, 73.3 percent had 1-5 beds, 20.0 percent had 6-10 beds, and 6.7 percent had more than 10 beds. Overall, 91.9 percent of the facilities had 1-2 OPD rooms. The number of rooms in OPDs also varied with the level of health facility, with general hospitals having more rooms.

All the private facilities provided laboratory services. More than 70 percent provide FP/RH and child health services. However, very few provided TB- and HIV-related lab services: HCT (provided by 14.8 percent of facilities), ART (0.0 percent), OI/STI (14.8 percent), and PMTCT (3.4 percent). Almost half (48.9 percent) provided TB diagnosis and treatment services (Table 24 and Annex C, Table C-5). Among the 13 health facilities that offered HCT services, only one had a posted HCT protocol, one had a penile model, two had cue cards, two had condoms, and three had audio-visual privacy.

TABLE 24. RANGE OF SERVICES PROVIDED BY TYPE OF HEALTH FACILITY, OROMIA REGION, 2007

Type of facility	Number and percentage that provide									
	HCT	ART	OI/STI	PMTCT	TB	Maternal health	FP/RH	Child health	ANC	Lab
General hospital (n=2)	0 (0.0%)	0 (0.0%)	1 (50.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (100%)
Higher clinic (n=15)	5 (33.3%)	0 (0%)	3 (20%)	1 (6.7%)	5 (33.3%)	6 (40%)	9 (60%)	11 (73.3%)	11 (73.3%)	15 (100%)
Medium clinic (n=71)	8 (11.3%)	0 (0%)	10 (14.1%)	2 (2.8%)	38 (53.5%)	32 (45.1%)	54 (76.1%)	51 (71.8%)	53 (74.6%)	71 (100%)
Total (n=88)	13 (14.8%)	0 (0.0%)	13 (14.8%)	3 (3.4%)	43 (48.9%)	38 (43.2%)	63 (71.6%)	62 (70.5%)	64 (72.7%)	88 (100%)

Laboratory tests conducted

All private health institutions conducted WBC counts and hemoglobin/hematocrit tests and the majority (92.7 percent) did AFB testing. In contrast, none of them did viral loads (Table 25).

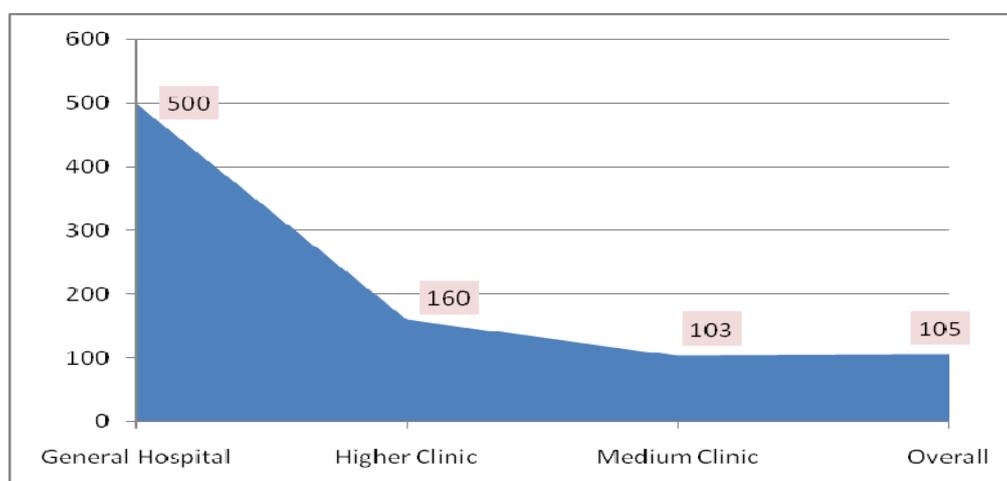
TABLE 25. LABORATORY TESTS CONDUCTED BY TYPE OF HEALTH FACILITY, OROMIA REGION, 2007

Type of facility	Percentage that conduct				
	WBC count	Hemoglobin/hematocrit	Platelet count	AFB	HIV rapid test
General hospital (n=2)	100.0	100.0	50.0	100.0	0.0
Higher clinic (n=15)	100.0	100.0	26.6	100.0	53.3
Medium clinic (n=71)	100.0	100.0	1.4	98.6	7.1
Total (n=88)	100.0	100.0	6.8	92.7	14.5

Client load

The median number of clients seen per week at the OPD was 105 (range: 2–730). The average number of HCT clients and TB cases treated as an OI were 10 and four, respectively. More detail is presented in Figure 3 and Annex C, Table C-6.

FIGURE 3. AVERAGE NUMBER OF OPD CLIENTS SEEN PER WEEK AT THE HEALTH FACILITY, OROMIA REGION, 2007



4.2.6 GUIDELINES AND PROTOCOLS

As shown in Table 26 and Annex C, Table C-7, most of the health facilities did not have guidelines and protocols for TB and HIV services. Surprisingly, no guidelines were available in the general hospitals.

TABLE 26. GUIDELINES AND PROTOCOLS FOR PROVISION OF SERVICES, OROMIA REGION, 2007

Type of facility	Percentage that have guideline/protocol on							
	TB (n=73)	TB/HIV (n=71)	HCT (n=69)	ART (n=71)	STI (n=70)	Management of HIV & OI (n=70)	PIHCT (n=70)	AFB & rapid HIV test (n=70)
General hospital (n=2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Higher clinic (n=15)	33.3	33.3	9.1	18.2	0.0	10.0	9.1	9.1
Medium clinic (n=71)	26.7	12.1	7.0	22.0	16.9	8.5	6.9	5.2
Total (n=88)	20 (27.4%)	11 (15.5%)	5 (7.2%)	15 (21.1%)	10 (14.3%)	6 (8.6%)	5 (7.1%)	4 (5.7%)

Note: Percentages are calculated using the denominator as the number of facilities where data were collected for each observation. The denominator may therefore vary for each indicator.

4.2.7 RECORD KEEPING, REPORTING, AND SUPERVISION

Seven facilities assessed had a data clerk to assist with record keeping and reporting. However, data were regularly recorded and compiled by 43 (48.9 percent) health facilities. Most private health facilities did not have recording and reporting forms related to TB and HIV. The availability of relevant registries declined with level of health facility (from general hospitals to medium clinics). Of the 88 facilities surveyed, 50 (56.8 percent) send their reports to the RHB, ZHD, or WoHO. Of these, 11 send their report to the RHB every month, 27 send the report to the ZHD every month, 10 send the report to the WoHO every month, one sends the report to the ZHD each quarter, and one sends the report to the WoHO each quarter. Most (87.5 percent) of the health facilities received supervision from RHB/ZHD/WoHO (Table 27 and Annex C, Table C-8).

TABLE 27. AVAILABILITY OF RECORDING AND REPORTING FORMS BY THE HEALTH FACILITY, OROMIA REGION, 2007

Category	Percentage that have					
	HCT registers	TB regist- ters	TB patient transfer & referral form	TB/HIV forms	Basic lab request form	Hospital referral form
General hospital (n=2)	0%	0%	0%	0%	0%	0%
Higher clinic (n=15)	5(33.3%)	1(6.7%)	3(20.0%)	1(6.7%)	8(53.3%)	10(66.7%)
Medium clinic (n=71)	2(2.8%)	0%	7(9.9%)	2(2.8%)	30(42.3%)	40(56.3%)
Total (n=88)	7(8.0%)	1(1.1%)	10(11.4%)	3(3.4%)	38(43.2%)	50(56.8%)

4.2.8 WILLINGNESS TO PARTICIPATE IN TB/HIV CARE

The assessment reviewed the willingness of the private health facilities to implement TB and HIV care. The analysis indicated that 77 (91.7 percent) of the facilities were willing to make at least three health workers available for a two-round training, and 61 (76.3 percent) reported they are able to handle logistics for PPM-DOTS (Table 28 and Annex C, Table C-9).

TABLE 28. WILLINGNESS OF THE PRIVATE HEALTH FACILITIES TO PARTICIPATE IN TB AND HIV CARE, OROMIA REGION, 2007

Type of facility	Number and percentage that		
	Are willing to avail ≥ 3 health providers for training (n=84)	Have staff who are trained and can be assigned to provide DOTS (n=75)	Reported they are able to handle logistics for PPM-DOTS (n=80)
General hospital	1 (100%)	1 (100%)	1 (100%)
Higher clinic	14 (100%)	3 (25%)	13 (92.9%)
Medium clinic	62 (89.9%)	6 (9.7%)	47 (72.3%)
Total	77 (91.7%)	10 (13.3%)	61 (76.3%)

5. CONCLUSIONS AND RECOMMENDATIONS

Based on this assessment, a total of 87 private health facilities were recruited for initiating TB/HIV services: 12 in Addis Ababa, 35 in Amhara, and 40 in Oromia. These facilities fulfill at least six of the eight recruitment criteria.

Across the three regions assessed, most health facilities have a valid license. The majority have adequate ventilation, illumination, and sufficient space or a room that can be reorganized for delivering DOTS and HCT services. In contrast, most do not have supplies for diagnosis of HIV (such as HIV test kits and ELISA machine) and none has a CD4 count machine, useful for follow-up of patients on ART. Most facilities assessed do have reagents for TB diagnosis.

In general, the health facilities assessed were equipped with basic laboratory equipment, disinfectant solutions, and clean and sterile gloves. However, most lacked face masks and safety boxes for sharps disposal. The majority of facilities in Amhara region have septic tanks and incinerators, equipment that is lacking in most health facilities in Addis Ababa and Oromia.

The average number of health workers in the facilities is below the optimal levels. There was a considerable gap in training of health workers on HCT (except in Amhara), PIHCT, ART, TB, and TB/HIV in all categories of health workers in the previous one year. For health workers who were trained in the past year, attrition rates were high, particularly in Addis Ababa and Oromia regions and for laboratory technicians in Amhara region.

Almost all the private health facilities assessed offer inpatient care and laboratory services. In Amhara and Oromia, more than two-thirds of facilities provide FP/RH services compared with less than half of facilities in Addis Ababa. Across all three regions, very few facilities provide services related to TB and HIV such as HCT, ART, and PMTCT. Most health facilities in Addis Ababa and Amhara provide OI/STI services. The availability of these services is limited in private health facilities in Oromia. The counseling rooms of most facilities in Amhara and Oromia providing HCT services lack posted HCT protocols.

There is a great variation in the number of clients seen in different sections of the service outlets across the private health facilities. On average, 21-24 patients are seen daily at the OPDs of facilities in Amhara region. The average number of clients seen at OPDs was used as selection criteria to identify health facilities to initiate TB services.

In general, availability of guidelines and protocols for HIV-related services such as HCT, ART, and PIHCT is quite poor across the facilities assessed.

Only 23 of the 179 facilities assessed had their own data clerk. In addition, few facilities had recording and reporting forms for TB and HIV services. Virtually all the private higher clinics in Addis Ababa were sending their reports to the RHB or sub-city health office. In contrast, about one-third of facilities in Amhara and nearly half of those in Oromia were not sending their reports to the respective government bodies. The majority of the private health facilities voiced their commitment to make at least three health workers available for a two-round training in TB and HIV care. In all three regions, facilities expressed their ability to handle logistics for PPM-DOTS.

Effectiveness of the forthcoming PPM-DOTS programs will entail strong commitment from the governmental health system, collaborating partners, and private providers. Specifically, it will involve training private providers about the national TB program; improving the availability of guidelines and protocols for TB/HIV services; and providing sufficient monitoring and supervision of private providers, particularly at the start of implementation. The private health facilities should also be

committed to improve their recording and reporting system, and equipment and supplies for TB and HIV diagnosis and follow-up, and should take measures to retain trained health workers.

ANNEX A. DATA TABLES, ADDIS ABABA CITY ADMINISTRATION

TABLE A-I. PRIVATE HIGHER CLINICS SELECTED FOR HCT AND DOTS SERVICES, ADDIS ABABA, 2007 (UNFULFILLED CRITERIA SHADED)

Name of facility	Ventilation	Space for DOTS	Space for HCT	Doctors (①= 1; ②= 2 or more)	Nurses (①= 1; ②= 2 or more)	Lab. tech (①= 1; ②= 2 or more)	Willingness to avail ≥ 3 HW for training	# of OPD patients/wk*	Total # criteria fulfilled (①= 6/8 ②=7/8 ③=8/8)
1. 22 Mazoria Higher Clinic	✓	✓	✓	②	②	②		④	⑦
2. Yehuleshet Higher Clinic	✓	✓		②	②	①	✓	①	⑥
3. Megegnagna Higher Clinic	✓	✓	✓	②	②	②	✓	③	⑧
4. Medahanialem Higher Clinic	✓	✓	✓	②	②	①	✓	②	⑧
5. Bole Michael Higher Clinic	✓	✓		①	②	①	✓	③	⑦
6. Blue Nile Higher Clinic	✓		✓	②	②	②	✓	③	⑦
7. Saris Higher Clinic	✓	✓	✓	②	②	②	✓	①	⑦
8. Tesfa Kokob Higher Clinic	**	✓	✓	②	②	①	✓	②	⑦
9. Kt.St Gebriel Higher Clinic	**	✓	**	②	②	②	✓	③	⑥
10. Africa Higher Clinic	**	✓	✓	②	②	②	✓	③	⑦
11. St. Mary Higher Clinic		✓	✓	②	②	②	✓	④	⑦
12. Abenet Higher Clinic	✓	✓	✓	②	②	②	✓	④	⑧

√= Available; N= not available; **=Data not available

①= First quartile (<70/wk)

②= Second quartile (70-105/wk)

③= Third quartile (106-194/wk)

④= Top quartile (>195/wk)

TABLE A-2. PROFILE OF NUMBER OF HEALTH WORKERS (ADDIS ABABA, N=33)

Name of facility	# doctors	# nurses	# lab technicians	# pharmacy technicians
1. Amede Higher Clinic	2	2	2	**
2. Kidisit Mariam Higher Clinic (No 2)	2	2	1	**
3. 22 Mazoria Higher Clinic	2	2	2	**
4. Yehuleshet Higher Clinic	2	2	1	**
5. Brook Higher Clinic	2	2	2	**
6. Kechen Medhanialem Higher Clinic	2	2	2	**
7. Adisu Gebeya Higher Clinic	1	2	1	**
8. Megenagna Higher Clinic	2	2	2	**
9. T/Haymanot Higher Clinic	2	2	2	**
10. Medahanialem Higher Clinic	2	2	1	**
11. Bole Michael Higher Clinic	1	2	1	**
12. Blue Nile Higher Clinic	2	2	2	**
13. St Paul International Higher Clinic	2	2	2	**
14. Saris Higher Clinic	2	2	2	**
15. Ayer Tena Higher Clinic	2	2	1	**
16. Tesfa Kokob Higher Clinic	2	2	1	**
17. Betesida Higher Clinic	1	2	2	**
18. Olompia Higher Clinic	2	2	1	**
19. Ethio Higher Clinic	2	2	2	**
20. Kt.St Gabriel Higher Clinic	2	2	2	**
21. Tesfa Higher Clinic	2	2	1	**
22. Africa Higher Clinic	2	2	2	**
23. Cathedral Higher Clinic	2	2	1	**
24. Tesfa Mariam Higher Clinic	2	2	2	**
25. Dagem Yelma Higher Clinic	2	2	1	**
26. Gofa Gebreal Higher Clinic	1	2	2	**
27. Tanna Addis Higher Clinic	2	2	2	**
28. Alabia Higher Clinic	2	2	1	**
29. Arada Giorgis Higher Clinic	1	2	2	**
30. Kidanmeheret Higher Clinic	2	2	2	**
31. Senay Higher Clinic	2	2	2	**
32. St.Mary Higher Clinic	2	2	2	**
33. Abenet Higher Clinic	2	2	2	**

**= Data not available; 1= 1; 2= 2 or more

TABLE A-3. EVALUATION OF PRIVATE HIGHER CLINIC LICENSE AND INFRASTRUCTURE (ADDIS ABABA, N=33)

Name of facility	Valid license	Well illuminated	Well ventilated	Has space for DOTS	Has space for HCT	Facility meets standard
1. Amede HC	✓	**	**	✓	**	**
2. Kidisit Mariam HC (No 2)	✓	**	**	✓	✓	**
3. 22 mazoria HC	✓	✓	✓	✓	✓	**
4. Yehuleshet HC	✓	✓	✓	✓		**
5. Brook HC	✓			✓	✓	✓
6. Kechen Medhanialem HC	✓	**	**			**
7. Adisu Gebeya HC	✓	✓	✓			**
8. Megenagna HC	✓	✓	✓	✓	✓	**
9. T/Haymanot HC	✓	✓	✓	**		**
10. Medahanialem HC	**	✓	✓	✓	✓	**
11. Bole Michael HC	✓	✓	✓	✓		✓
12. Blue Nile HC	✓	✓	✓		✓	**
13. St Paul International HC	✓		**	✓	✓	✓
14. Saris HC	✓	✓	✓	✓	✓	**
15. Ayer Tena HC		**	**	**		**
16. Tesfa KokobHC	✓	**	**	✓	✓	✓
17. Betesida HC	✓	✓	✓	✓	✓	✓
18. Olompia HC	✓	**	**	✓	✓	
19. Ethio HC	✓	✓	✓	✓	✓	**
20. Kt.St Gabriel HC	✓		**	✓	**	**
21. Tesfa HC	✓	✓			✓	**
22. Africa HC	✓	**	**	✓	✓	**
23. Cathedral HC	✓	✓				**
24. Tesfa Mariam HC	✓	✓	✓	✓	✓	**
25. Dagem Yelma HC	✓	✓	✓	**	✓	**
26. Gofa Gebreal HC	✓			✓	✓	**
27. Tanna Addis HC	✓	✓	✓	✓	✓	✓
28. Alabia HC	✓	**	**	✓	✓	**
29. Arada Giorgis HC	✓					**
30. Kidanmeheret	✓	✓	✓	✓	✓	**
31. Senay HC	✓			✓	✓	**
32. St.Mary HC	✓			✓	✓	**
33. Abenet HC	✓	✓	✓	✓	✓	**

✓= Yes; Blank=No; **= Data not available

TABLE A-4. AVAILABILITY OF EQUIPMENT AND SUPPLIES (ADDIS ABABA, N=33)

Name of facility	Microscope	HIV test kits	Reagents for AFB	Detergents and disinfectants	Refrigerator	Slides	Sputum cup	Test tubes
1. Amede HC	✓		✓		**	**		✓
2. Kidisit Mariam HC (No 2)	✓	✓	✓	✓	✓	✓	✓	✓
3. 22 mazoria HC	✓	✓	✓	✓	✓	✓	✓	✓
4. Yehuleshet HC	✓		✓	✓	✓	✓	✓	✓
5. Brook HC	✓	✓		✓	✓	✓		✓
6. Kechen Medhanialem HC	**	**	**	**	**	**	**	**
7. Adisu Gebeya HC	✓	✓		✓	✓	✓	✓	✓
8. Megenagna HC	✓		✓	✓	✓	✓	✓	✓
9. T/Haymanot HC	✓	**	✓	✓	✓	✓	✓	✓
10. Medahanialem HC	✓	✓	✓	✓	✓	✓	✓	✓
11. Bole Michael HC	✓		✓	✓	✓	✓	✓	✓
12. Blue Nile HC	✓	✓	✓	✓	✓	✓	✓	✓
13. St Paul International HC	✓		✓	✓	✓	✓		✓
14. Saris HC	✓	✓	✓	✓	✓	✓		✓
15. Ayer Tena HC	✓		✓	✓	✓	✓	✓	✓
16. Tesfa KokobHC	✓		✓	✓	✓	✓	✓	✓
17. Betesida HC	✓	✓	✓	✓	✓	✓	✓	✓
18. Olompia HC	✓	✓	✓	✓	✓	✓	✓	✓
19. Ethio HC	✓	✓	✓	✓	✓	✓	✓	✓
20. Kt.St Gabriel HC	✓	✓	✓	✓	✓	✓	✓	✓
21. Tesfa HC	✓	✓	✓	✓	✓	✓	✓	✓
22. Africa HC	✓	✓	✓	✓	✓	✓	✓	✓
23. Cathedral HC	✓		✓	✓	✓	✓	✓	✓
24. Tesfa Mariam HC	**	✓	✓	✓	✓	✓	✓	✓
25. Dagem Yelma HC	✓	✓	✓	✓	✓	✓	✓	✓
26. Gofa Gebreal HC	✓	✓	✓	✓	✓	✓	✓	✓
27. Tanna Addis HC	✓	✓	✓	✓	✓	✓	✓	✓
28. Alabia HC	✓	✓	✓	✓	✓	✓	✓	✓
29. Arada Giorgis HC	✓	✓	✓		✓	✓	✓	✓
30. Kidanmeheret HC	✓	✓	✓	✓	✓	✓	✓	✓
31. Senay HC	✓	✓	✓	✓	✓	✓	✓	✓
32. St.Mary HC	✓	✓	✓	✓	✓	✓	✓	✓
33. Abenet HC	✓	✓	✓	✓	✓	✓	✓	✓

✓ = Yes; Blank=No; ** = Data not available

**TABLE A-5. AVAILABILITY OF BASIC SERVICES IN THE PRIVATE HIGHER CLINICS
(ADDIS ABABA, N=33)**

Name of facility	HCT	ART	OI/ STI	PM TCT	TB	Maternal health	FP/ RH	Child health	ANC	Lab
1. Amede HC	✓		✓		✓		***			✓
2. Kidisit Mariam HC (No 2)	✓						✓	✓	✓	✓
3. 22 mazoria HC	✓		✓			✓	✓	✓	✓	✓
4. Yehuleshet HC										✓
5. Brook HC			✓		✓	**		✓	✓	✓
6. Kechen Medhanialem HC										
7. Adisu Gebeya HC							✓			✓
8. Megenagna HC	✓									✓
9. T/Haymanot HC			✓		✓	✓	✓	✓	✓	✓
10. Medahanialem HC	✓		✓			✓	✓	✓	✓	✓
11. Bole Michael HC										✓
12. Blue Nile HC	✓		✓					✓		✓
13. St Paul International HC			✓		✓					✓
14. Saris HC	✓		✓			✓	✓	✓	✓	✓
15. Ayer Tena HC			✓	**			**			✓
16. Tesfa KokobHC			✓			✓	✓			✓
17. Betesida HC	✓		✓		✓					✓
18. Olompia HC	✓		✓		✓		✓			✓
19. Ethio HC	✓		✓			✓	✓	✓	✓	✓
20. Kt.St Gebriel HC	✓		✓		✓					✓
21. Tesfa HC	✓		✓		✓			✓	✓	✓
22. Africa HC	✓		✓		**	**				✓
23. Cathedral HC										✓
24. Tesfa Mariam HC	✓		✓			✓	✓	✓	✓	✓
25. Dagem Yelma Hc	✓		✓		✓					✓
26. Gofa Gebreal HC	✓		✓			✓	✓			✓
27. Tanna Addis HC	✓		✓		✓			✓	✓	✓
28. Alabia HC	✓		✓		✓	✓		✓	✓	✓
29. Arada Giorgis HC	✓		✓				✓		✓	✓
30. Kidanmeheret	✓		✓		✓		✓			✓
31. Senay HC	✓		✓		✓		✓			✓
32. St.Mary HC	✓		✓			✓	✓	✓	✓	✓
33. Abenet HC	✓									✓

✓= Yes; Blank=No; **= Data not available

TABLE A-6. PATIENT LOAD OF THE PRIVATE HIGHER CLINICS (ADDIS ABABA, N=33)

Name of facility	OPD patients/wk	OPD patients/wk (in quartiles)
1. Amede Higer clinic	245	④
2. Kidisit Mariam HC (No 2)	175	⑤
3. 22 mazoria HC	315	④
4. Yehuleshet HC	72	①
5. Brook HC	100	②
6. Kechen Medhanialem HC	**	**
7. Adisu Gebeya HC	224	⑤
8. Megenagna HC	175	⑤
9. T/Haymanot HC	700	④
10. Medahanialem HC	105	②
11. Bole Michael HC	140	③
12. Blue Nile HC	180	③
13. St Paul International HC	30	①
14. Saris HC	80	①
15. Ayer Tena HC	120	②
16. Tesfa KokobHC	120	②
17. Betesida HC	60	①
18. Olompia HC	67	①
19. Ethio HC	350	④
20. Kt.St Gebriel HC	200	③
21. Tesfa HC	120	②
22. Africa HC	**	**
23. Cathedral HC	120	②
24. Tesfa Mariam HC	50	①
25. Dagem Yelma Hc	120	②
26. Gofa Gebreal HC	15	①
27. Tanna Addis HC	120	②
28. Alabia HC	180	③
29. Arada Giorgis HC	105	②
30. Kidanmeheret	120	②
31. Senay HC	240	④
32. St.Mary HC	420	④
33. Abenet HC	245	④

✓ = Yes; Blank=No; **= Data not available ①= First quar ile (<100/wk)

②= Second quar ile (100-120/wk)

③= Third quartile (121-224/wk)

④= Top quar ile (>224/wk)

TABLE A-7. AVAILABILITY OF GUIDELINES AND PROTOCOLS (ADDIS ABABA, N=33)

Name of facility	TB	TB/ HIV	HCT	ART	STI	Clinical management of HIV & OI	PIHCT	AFB & HIV test lab manuals
1. Amede Higer clinic	**	**	✓	**	**	✓	**	✓
2. Kidisit Mariam HC (No 2)	✓		✓					✓
3. 22 mazoria HC								
4. Yehuleshet HC								
5. Brook HC	✓	**	**	✓	**	**	**	**
6. Kechen Medhanialem HC	**	**	**	**	**	**	**	**
7. Adisu Gebeya HC								
8. Megenagna HC			**					
9. T/Haymanot HC	✓	✓	✓	✓				
10. Medahanialem HC			✓					
11. Bole Michael HC								
12. Blue Nile HC								
13. St Paul International HC			**		**			
14. Saris HC	✓							
15. Ayer Tena HC	**	✓	**	**	**	**	**	**
16. Tesfa KokobHC								
17. Betesida HC	✓	✓	✓					
18. Olompia HC	✓	✓	✓					
19. Ethio HC	✓	**	**	✓	✓	**	**	**
20. Kt.St Gebriel HC								
21. Tesfa HC	✓		✓					
22. Africa HC	✓							
23. Cathedral HC								
24. Tesfa Mariam HC	**	**	✓	**	**	**	**	**
25. Dagem Yelma Hc	✓							
26. Gofa Gebreal HC								
27. Tanna Addis HC			✓					
28. Alabia HC			**	**		**	✓	**
29. Arada Giorgis HC								
30. Kidanmeheret	✓	✓	✓	**	**	**	**	**
31. Senay HC	✓	✓	✓	✓				
32. St.Mary HC	✓	✓	✓	✓	✓			
33. Abenet HC	✓	✓	✓			✓	✓	

✓ = Yes; Blank=No; ** = Data not available

TABLE A-8. RECORDING AND REPORTING BY THE PRIVATE HIGHER CLINICS (ADDIS ABABA, N=33)

Name of facility	Availability of data clerk	Regular recording and compilation	Regular reporting to one of these: RHB/SCHO
1. Amede Higer clinic			✓
2. Kidisit Mariam HC (No 2)		✓	✓
3. 22 mazoria HC	✓	✓	✓
4. Yehuleshet HC	✓	✓	✓
5. Brook HC		✓	✓
6. Kechen Medhanialem HC	**	**	
7. Adisu Gebeya HC			✓
8. Megenagna HC		✓	✓
9. T/Haymanot HC		✓	✓
10. Medahanialem HC		✓	✓
11. Bole Michael HC		✓	✓
12. Blue Nile HC		✓	✓
13. St Paul International HC	✓	**	✓
14. Saris HC		✓	✓
15. Ayer Tena HC		✓	✓
16. Tesfa Kokob HC		✓	✓
17. Betesida HC		✓	✓
18. Olompia HC		✓	✓
19. Ethio HC	✓	✓	✓
20. Kt.St Gabriel HC		✓	✓
21. Tesfa HC		✓	✓
22. Africa HC		✓	✓
23. Cathedral HC	**	**	✓
24. Tesfa Mariam HC		✓	✓
25. Dagem Yelma Hc		✓	✓
26. Gofa Gebreal HC		✓	✓
27. Tanna Addis HC		✓	✓
28. Alabia HC		✓	✓
29. Arada Giorgis HC		✓	✓
30. Kidanmeheret		✓	✓
31. Senay HC	**	**	✓
32. St. Mary HC		✓	✓
33. Abenet HC	✓	✓	✓

✓= Yes; Blank=No; **= Data not available

TABLE A-9. WILLINGNESS OF THE PRIVATE HIGHER CLINICS FOR FUTURE INVOLVEMENT IN TB/HIV SERVICE PROVISION (ADDIS ABABA, N=33)

Name of facility	Willingness to avail ≥ 3 health workers for training	Availability of trained staff that can be assigned to work on DOTS	Ability to handle logistics on PPM-DOTS
1. Amede HC	✓	✓	**
2. Kidisit Mariam HC (No 2)	**	**	✓
3. 22 mazoria HC			✓
4. Yehuleshet HC	✓		✓
5. Brook HC	✓	**	**
6. Kechen Medhanialem HC	**	**	**
7. Adisu Gebeya HC	✓		✓
8. Megenagna HC	✓		✓
9. T/Haymanot HC	✓	✓	✓
10. Medahanialem HC	✓		✓
11. Bole Michael HC	✓	✓	✓
12. Blue Nile HC	✓	✓	✓
13. St Paul International HC	✓		
14. Saris HC	✓	✓	✓
15. Ayer Tena HC	✓		✓
16. Tesfa KokobHC	✓	✓	
17. Betesida HC	✓	✓	✓
18. Olompia HC	**	**	**
19. Ethio HC	✓		
20. Kt.St Gabriel HC	✓	✓	**
21. Tesfa HC	**	**	**
22. Africa HC	✓	✓	**
23. Cathedral HC	**	**	**
24. Tesfa Mariam HC	**	**	**
25. Dagem Yelma HC	✓	✓	
26. Gofa Gebreal HC	**		✓
27. Tanna Addis HC	✓	✓	**
28. Alabia HC	✓		**
29. Arada Giorgis HC	**	**	**
30. Kidanmeheret	**	✓	✓
31. Senay HC	✓	✓	✓
32. St. Mary HC	✓		✓
33. Abenet HC	✓	✓	✓

✓= Yes; Blank=No; **= Data not available

ANNEX B. DATA TABLES, AMHARA REGION

TABLE B-I. PRIVATE HEALTH FACILITIES SELECTED FOR HCT AND DOTS SERVICES, AMHARA REGION, 2007 (UNFULFILLED CRITERIA SHADED)

Name of facility	Ventilation	Space for DOTS	Space for HCT	Doctors (①= 1; ②= 2 or more)	Nurses (①= 1; ②= 2 or more)	Lab. tech (①= 1; ②= 2 or more)	Williness to avail ≥ 3 HW for training	# of OPD patients/wk*	Total # of criteria fulfilled (⑥= 6/8 ⑦=7/8 ⑧=8/8)
1. Gamby HC		√	√	②	②	②	√	④	⑦
2. Jerusalem HC		√	√	②	②	②	√	④	⑦
3. K/Mihret HC		√	√	②	②	①	√	④	⑦
4. Metekel HC	√	√	√	①	①	①	√	⑤	⑧
5. Hiwot Medium Clinic	√	√		①	①	②	√	④	⑦
6. Damot Medium Clinic	√	√	√	①	②	①	√	②	⑧
7. Hayat Medium Clinic	√	√	√	①	①	①	√	②	⑧
8. Shebele Medium Clinic	√	√	√	①	**	①	√	③	⑦
9. Sr. John Higher M/Center	√	√	√	②	②	②	√	③	⑧
10. ALEM-SAGA HC	√	√	√	②	②	②	√	④	⑧
11. Jeyenesalem H/Clinic	√	√	√	②	②	②	√	②	⑧
12. Kidus Georgis H. Clinic	√	√	√	②	①	②	√	④	⑧
13. Nur HC	√	√	√	②	②	②	√	③	⑧
14. Brehantesfa Medium Clinic	√	√	√	①	②	①	√	②	⑧
15. St. Mariam Medium Clinic	√	√	√	①	**	①	√	①	⑥
16. Stadium Medium Clinic	√	√	√	①	②	①	√	③	⑧
17. Kedus Gebrael H. Clinic	√	√	√	②	②	①	√	③	⑧
18. Ledeta Mulu M. Clinic	√	√	√	①	①	①	√	①	⑦
19. Hayat Medium Clinic	√	√	√	①	①	①	√	①	⑦
20. Gonder HC	√	√	√	②	①	②	√	④	⑧
21. Universal Medium Clinic	√	√	√	①	②	①	√	②	⑧
22. Meneharia HC	√	√	√	①	②	①	√	③	⑧
23. Adam Medium Clinic	√	√	√	①	①	①	√	①	⑦
24. Ethiopia Medium Clinic	√	√		①	①	①	√	①	⑥
25. Dr. Teklewoin S.H. Clinic	√	√		①	②	①	√	①	⑥
26. Teferi Memorial M/Clinic	√	√		①	**	①	√	③	⑥
27. Dr. Amir HC	√	√	√	②	②	①	√	④	⑧
28. Bati G. Hospital	√	√	√	②	②	②	√	④	⑧
29. Shalom Medium Clinic	√	√		①	①	①	√	⑤	⑦
30. Ethio G. Hospital	√	√	√	②	②	②	√	④	⑧
31. Selam HC	√	√	√	②	②	②	√	④	⑧
32. Wollo HC	√	√	√	**	②	②	√	③	⑦
33. Hayat Medium Clinic	√	√	√	①	①	①	√	④	⑧
34. Hiwot Fana HC	√	√	√	②	①	①	√	②	⑧

Name of facility	Ventilation	Space for DOTS	Space for HCT	Doctors (①= 1; ②= 2 or more)	Nurses (①= 1; ②= 2 or more)	Lab. tech (①= 1; ②= 2 or more)	Willingness to avail ≥ 3 HW for training	# of OPD patients/wk*	Total # of criteria fulfilled (⑥= 6/8 ⑦=7/8 ⑧=8/8)
35. Brook HC	√	√	√	②	①	②	√	④	⑧

√= Yes; Blank=No; **= Data not available

①= First quartile (<70/wk)

②= Second quartile (70-105/wk)

③= Third quartile (106-194/wk)

④= Top quartile (>195/wk)

TABLE B-2. PROFILE OF NUMBER OF HEALTH WORKERS (AMHARA REGION, N=58)

Name of facility	# doctors	# nurses	# lab technicians	# pharmacy technicians
1. Ethiopia Medium Clinic	1	1	1	1
2. Bhir Dar Medium Clinic	1	0	1	0
3. Gamby HC	2	2	2	2
4. Jerusalem HC	2	2	2	2
5. K/Mihret HC	2	2	1	0
6. Beza HC	1	1	1	0
7. Agm.sec Medium Clinic	0	1	2	0
8. Metekel HC	1	1	1	1
9. Universal Medium Clinic	1	2	1	0
10. Hiwot Medium Clinic	1	1	2	0
11. Damot Medium Clinic	1	2	1	2
12. Hayat Medium Clinic	1	1	1	1
13. Shebele Medium Clinic	1	0	1	2
14. Dr.Lealem Medium Clinic	0	1	0	0
15. Markos Medium Clinic	0	0	0	0
16. Sr.John Higher MC	2	2	2	1
17. ALEM-SAGA HC	2	2	2	1
18. Jeyenesalem HC	2	2	2	0
19. Dilenesa Medium Clinic	0	1	1	0
20. Kidus Georgis HC	2	1	2	2
21. Amanuuel Medium Clinic	1	0	1	0
22. Nur HC	2	2	2	0
23. Hiwot Medium Clinic	1	2	1	0
24. Brehantesfa Medium Clinic	1	2	1	0
25. Shehedu Medium Clinic	1	0	1	0
26. Medehanlem Medium Clinic	1	0	1	0
27. St.Mariam Medium Clinic	1	0	1	0
28. Selema Medium Clinic	1	2	1	0
29. Stadium Medium Clinic	1	2	1	0
30. Kedus Gebrael H Clinic	2	2	1	1
31. Ledeta Mulu Medium Clinic	1	1	1	1
32. Hayat Medium Clinic	1	1	1	0
33. Gonder HC	2	1	2	0
34. Universal Medium Clinic	1	2	1	1
35. Meneharia HC	1	2	1	0
36. Selam Medium Clinic	1	2	1	0
37. Adam Medium Clinic	1	1	1	0
38. Tensae Medium Clinic	1	1	1	0
39. Ethiopia Medium Clinic	0	1	1	0
40. Ateya Medium Clinic	1	2	1	0
41. Dr.Teklewoin S.H Clinic	1	2	1	0
42. Teferi Memorial M.Clinic	1	0	1	0
43. Dr.Amir HC	2	2	1	0
44. Ruh Medium Clinic	1	1	1	0
45. Bati G.Hospital	2	2	2	2
46. Shalom Medium Clinic	1	1	1	0
47. Ethio G.Hospital	2	2	2	0
48. Selam HC	2	2	2	0
49. Wollo HC	**	2	2	0
50. Hayat Medium Clinic	1	1	1	0
51. Hiwot Fana HC	2	1	1	0
52. Yefat Medium Clinic	1	**	1	0
53. Alpha Medium Clinic	1	**	1	0
54. Brook HC	2	1	2	0
55. Hiberet Medium Clinic	**	**	1	0

Name of facility	# doctors	# nurses	# lab technicians	# pharmacy technicians
56. Saleh Medium Clinic	①	①	①	①
57. Gelila Medium Clinic	①	①	**	①
58. Showa Poly Medium Clinic	①	①	①	①

**= Data not available; ①=nil; ①= 1; ②= 2 or more

TABLE B-3. EVALUATION OF FACILITY LICENSE AND INFRASTRUCTURE (AMHARA REGION, N=58)

Name of facility	Valid license	Well illuminated	Well ventilated	Has space for DOTS	Has space for HCT	Facility meets standard
1. Ethiopia Medium Clinic	✓			✓		
2. Bhir Dar Medium Clinic	✓					
3. Gamby HC	✓			✓	✓	
4. Jerusalem HC	✓			✓	✓	
5. K/Mihret HC	✓			✓	✓	✓
6. Beza HC	✓			✓	✓	
7. Agm.sec Medium Clinic	✓				**	
8. Metekel HC	✓	✓	✓	✓	✓	✓
9. Universal Medium Clinic	✓	✓	✓	✓		✓
10. Hiwot Medium Clinic		✓	✓	✓		✓
11. Damot Medium Clinic	✓	✓	✓	✓	✓	✓
12. Hayat Medium Clinic	✓	✓	✓	✓	✓	✓
13. Shebele Medium Clinic	✓	✓	✓	✓	✓	✓
14. Dr.Lealem Medium Clinic		✓	✓	✓	✓	✓
15. Markos Medium Clinic	✓	✓	✓	✓	✓	✓
16. Sr.John Higher MC	✓		✓	✓	✓	✓
17. ALEM-SAGA HC	✓		✓	✓	✓	
18. Jeyenesalem HC	✓	✓	✓	✓	✓	
19. Dilenesa Medium Clinic		✓	✓	✓	✓	✓
20. Kidus Georgis HC	✓	✓	✓	✓	✓	✓
21. Amanuuel Medium Clinic	✓	✓	✓	✓		
22. Nur HC		✓	✓	✓	✓	✓
23. Hiwot Medium Clinic		✓	✓	✓	✓	
24. Brehantesfa Medium Clinic	✓	✓	✓	✓	✓	✓
25. Shehedi Medium Clinic	✓	✓	✓	✓	✓	✓
26. Medehanlem Medium Clinic	✓	✓	✓	✓	✓	✓
27. St.Mariam Medium Clinic	✓	✓	✓	✓	✓	✓
28. Selema Medium Clinic	✓	✓	✓	✓	✓	✓
29. Stadium Medium Clinic	✓	✓	✓	✓	✓	✓
30. Kedus Gebrael HC	✓	✓	✓	✓	✓	✓
31. Ledeta Mulu Medium Clinic	✓	✓	✓	✓	✓	✓
32. Hayat Medium Clinic	✓	✓	✓	✓	✓	✓
33. Gonder HC	✓	✓	✓	✓	✓	✓
34. Universal Medium Clinic	✓	✓	✓	✓	✓	✓
35. Meneharia HC	✓	✓	✓	✓	✓	✓
36. Selam Medium Clinic	✓	✓	✓	✓	✓	
37. Adam Medium Clinic	✓	✓	✓	✓	✓	✓
38. Tensae Medium Clinic	✓	✓	✓	✓	✓	✓
39. Ethiopia Medium Clinic		✓	✓	✓		
40. Ateya Medium Clinic	✓	✓	✓	✓	✓	✓
41. Dr.Teklewoin S.HC	✓	✓	✓	✓		
42. Teferi Memorial M.Clinic	✓	✓	✓	✓		
43. Dr.Amir HC	✓	✓	✓	✓	✓	
44. Ruh Medium Clinic	✓	✓	✓	✓	✓	
45. Bati G.Hospital	✓	✓	✓	✓	✓	
46. Shalom Medium Clinic	✓	✓	✓	✓		
47. Ethio G.Hospital	✓	✓	✓	✓	✓	
48. Selam HC	✓	✓	✓	✓	✓	
49. Wollo HC	✓	✓	✓	✓	✓	
50. Hayat Medium Clinic	✓	✓	✓	✓	✓	✓
51. Hiwot Fana HC	✓	✓	✓	✓	✓	
52. Yefat Medium Clinic		✓	✓		**	
53. Alpha Medium Clinic	✓	✓	✓	✓		

Name of facility	Valid license	Well illuminated	Well ventilated	Has space for DOTS	Has space for HCT	Facility meets standard
54. Brook HC	✓	✓	✓	✓	✓	✓
55. Hiberet Medium Clinic	✓	✓	✓			
56. Saleh Medium Clinic	✓	✓	✓	✓	✓	
57. Gelila Medium Clinic	✓	✓	✓		**	
58. Showa Poly Medium Clinic	✓	✓	✓			

✓= Yes; Blank=No; **= Data not available

TABLE-B-4. AVAILABILITY OF EQUIPMENT AND SUPPLIES (AMHARA REGION, N=58)

Name of facility	Microscope	HIV test kits	Reagents for AFB	Detergents & disinfectants	Refrigerator	Slides	Sputum cup	Test tubes
1. Ethiopia Medium Clinic	✓		✓	✓	✓	✓	**	✓
2. Bhir Dar Medium Clinic	**	**	**	**	**	**	**	**
3. Gamby HC	✓	✓	✓	✓	✓	✓	✓	✓
4. Jerusalem HC	✓	✓	✓	✓	✓	✓	✓	✓
5. K/Mihret HC	✓	✓	✓	✓	✓	✓		✓
6. Beza HC	✓		✓	✓	✓	✓		✓
7. Agm.sec Medium Clinic	**	**	**	**	**	**	**	**
8. Metekel HC	✓			✓	✓	✓	✓	✓
9. Universal Medium Clinic	✓			✓	✓	✓	**	**
10. Hiwot Medium Clinic	✓			✓	✓	✓		✓
11. Damot Medium Clinic	✓	✓	✓	✓	✓	✓	✓	✓
12. Hayat Medium Clinic	✓			✓		✓	✓	✓
13. Shebele Medium Clinic	✓		✓	✓	✓	✓	✓	✓
14. Dr.Lealem Medium Clinic	✓	✓	✓	✓	✓	✓	✓	✓
15. Markos Medium Clinic	✓	✓	✓	✓	✓	✓	✓	✓
16. Sr.John Higher MC	✓	✓	✓	✓	✓	✓	✓	✓
17. ALEM-SAGA HC	✓	✓	✓	✓	✓	✓	✓	✓
18. Jeyenesalem HC	✓	**	✓	✓	✓	✓	✓	✓
19. Dilenesa Medium Clinic	✓		✓	✓	✓	✓	✓	✓
20. Kidus Georgis HC	✓	✓	✓	✓	✓	✓	✓	✓
21. Amanuuel Medium Clinic	✓		✓	✓	✓	✓	✓	✓
22. Nur HC	✓		✓	✓	✓	✓	✓	✓
23. Hiwot Medium Clinic	✓		✓	✓	✓	✓	✓	✓
24. Brehantesfa Medium Clinic	✓	✓	✓	✓	✓	✓	✓	✓
25. Shehedi Medium Clinic	✓		✓	✓	✓	✓	✓	✓
26. Medehanlem Medium Clinic	✓		✓	✓	✓	✓	✓	✓
27. St.Mariam Medium Clinic	✓		✓	✓	✓	✓	✓	✓
28. Selema Medium Clinic	✓		✓	✓	✓	✓	✓	✓
29. Stadium Medium Clinic	✓		✓	✓	✓	✓	✓	✓
30. Kedus Gebrael HC	✓		✓	✓	✓	✓	✓	✓
31. Ledeta Mulu Medium Clinic	✓		✓	✓	✓	✓	✓	✓
32. Hayat Medium Clinic	✓		✓	✓	✓	✓	✓	✓
33. Gonder HC	✓		✓	✓	✓	✓	✓	✓
34. Universal Medium Clinic	✓	✓	✓	✓	✓	✓	✓	✓
35. Meneharia HC	✓		✓	✓	✓	✓	✓	✓
36. Selam Medium Clinic	✓		✓	✓		✓	✓	✓
37. Adam Medium Clinic	✓		✓	✓	✓	✓	✓	✓
38. Tensae Medium Clinic	✓		✓	✓		✓	✓	✓
39. Ethiopia Medium Clinic	✓		✓	✓		✓	✓	✓
40. Ateya Medium Clinic	✓	✓	✓	✓	✓	✓	✓	✓
41. Dr.Teklewoin S.HC	✓		✓	✓	✓	✓	✓	✓
42. Teferi Memorial M.Clinic	✓		✓	✓	✓	✓	✓	✓
43. Dr.Amir HC	✓	✓	✓	✓	✓	✓	✓	✓
44. Ruh Medium Clinic	✓		✓	✓	✓	✓		✓
45. Bati G.Hospital	✓	✓	✓	✓	✓	✓	✓	✓
46. Shalom Medium Clinic	✓	✓	✓	✓	✓	✓	✓	✓
47. Ethio G.Hospital	✓	✓	✓	✓	✓	✓	✓	✓
48. Selam HC	✓	✓	✓	✓	✓	✓	✓	✓
49. Wollo HC	✓	✓	✓	✓	✓	✓	✓	✓
50. Hayat Medium Clinic	✓		✓	✓	✓	✓	✓	✓
51. Hiwot Fana HC	✓	✓	✓	✓	✓	✓	✓	✓
52. Yefat Medium Clinic	✓		✓	✓	✓	✓	✓	✓
53. Alpha Medium Clinic	✓		✓	✓	✓	✓	✓	✓

Name of facility	Microscope	HIV test kits	Reagents for AFB	Detergents & disinfectants	Refrigerator	Slides	Sputum cup	Test tubes
54. Brook HC	✓	✓	✓	✓	✓	✓	✓	✓
55. Hiberet Medium Clinic	✓		✓	✓	✓	✓	✓	✓
56. Saleh Medium Clinic	✓		✓	✓	✓	✓	✓	✓
57. Gelila Medium Clinic	✓		✓	✓		✓	✓	✓
58. Showa Poly Medium Clinic	✓		✓	✓	✓	✓	✓	✓

✓= Yes; Blank=No; **= Data not available

TABLE B-5. AVAILABILITY OF BASIC SERVICES IN THE HEALTH FACILITY (AMHARA REGION, N=58)

Name of facility	HCT	ART	OI/STI	PM TCT	TB	Maternal health	FP/ RH	Child health	ANC	Lab
1. Ethiopia Medium Clinic			**	**	**	**	**	**	**	**
2. Bhir Dar Medium Clinic					**					✓
3. Gamby HC	✓		✓		**	**	✓	✓	✓	✓
4. Jerusalem HC	✓		✓		✓	✓	✓	✓	✓	✓
5. K/Mihret HC	✓		✓		**	✓	✓	✓	✓	✓
6. Beza HC							✓		✓	✓
7. Agm.sec Medium Clinic	**	**	**	**	**	**	**	**	**	**
8. Metekel HC	✓				✓	✓	✓	✓	✓	✓
9. Universal Medium Clinic			**		**					✓
10. Hiwot Medium Clinic			✓		**		✓	✓		✓
11. Damot Medium Clinic	✓				✓	✓	✓	✓	✓	✓
12. Hayat Medium Clinic					✓	✓	✓	✓	✓	✓
13. Shebele Medium Clinic					✓	**	**	**	**	**
14. Dr.Lealem Medium Clinic	✓				✓	**	**	**	**	**
15. Markos Medium Clinic	✓				✓	**	**	**	**	**
16. Sr.John Higher MC	✓		✓		✓	✓	✓	✓	✓	✓
17. ALEM-SAGA HC	✓		✓			✓	✓	✓	✓	✓
18. Jeyenesalem HC	✓		✓		✓		✓	✓	✓	✓
19. Dilenesa Medium Clinic					✓	✓	✓	✓	✓	✓
20. Kidus Georgis HC	✓		✓		**	✓	✓	✓	✓	✓
21. Amanuuel Medium Clinic					✓		✓	✓	✓	✓
22. Nur HC							✓	✓	✓	✓
23. Hiwot Medium Clinic						✓	✓	✓		✓
24. Brehantesfa Medium Clinic	✓		✓				✓	✓	✓	✓
25. Shehedi Medium Clinic							✓	✓	✓	✓
26. Medehanlem Medium Clinic			✓			✓	✓	✓	✓	✓
27. St.Mariam Medium Clinic						✓	✓	✓	✓	✓
28. Selema Medium Clinic			✓			✓	✓	✓	✓	✓
29. Stadium Medium Clinic			✓				✓	✓	✓	✓
30. Kedus Gebrael HC							✓	✓	✓	✓
31. Ledeta Mulu Medium Clinic						✓	✓	✓	✓	✓
32. Hayat Medium Clinic			✓				✓	✓		✓
33. Gonder HC			✓						✓	✓
34. Universal Medium Clinic	✓		✓			✓	✓	✓	✓	✓
35. Meneharia HC							✓	✓	✓	✓
36. Selam Medium Clinic			✓				✓	✓	✓	✓
37. Adam Medium Clinic			✓			✓	✓	✓	✓	✓
38. Tensae Medium Clinic			✓			✓	✓	✓	✓	✓
39. Ethiopia Medium Clinic							✓	✓	✓	✓
40. Ateya Medium Clinic	✓		✓			✓	✓	✓	✓	✓
41. Dr.Teklewoin S.HC			✓				✓			✓
42. Teferi Memorial M.Clinic			✓			✓	✓	✓	✓	✓
43. Dr.Amir HC	✓		✓						✓	✓
44. Ruh Medium Clinic	✓						✓	✓		✓
45. Bati G.Hospital	✓		✓			✓	✓	✓	✓	✓
46. Shalom Medium Clinic	✓		✓			✓	✓	✓	✓	✓
47. Ethio G.Hospital	✓		✓			✓	✓	✓	✓	✓
48. Selam HC	✓		✓			✓		✓	✓	✓
49. Wollo HC	✓		✓			✓		✓	✓	✓
50. Hayat Medium Clinic			✓			✓	✓	✓	✓	✓
51. Hiwot Fana HC	✓		✓			✓	✓	✓	✓	✓
52. Yefat Medium Clinic						✓	✓	✓	✓	✓
53. Alpha Medium Clinic	**		✓			✓	✓	✓	✓	✓
54. Brook HC	✓	**	✓	✓		✓	✓	✓	✓	✓

Name of facility	HCT	ART	OI/STI	PM TCT	TB	Maternal health	FP/RH	Child health	ANC	Lab
55. Hiberet Medium Clinic							✓			✓
56. Saleh Medium Clinic			✓			✓	✓	✓	✓	✓
57. Gelila Medium Clinic						✓	✓	✓	✓	✓
58. Showa Poly Medium Clinic			✓			✓	✓	✓	✓	✓

✓= Yes; Blank=No; **= Data not available

TABLE B-6. PATIENT LOAD OF THE HEALTH FACILITIES (AMHARA REGION, N=58)

Name of facility	OPD patients/wk	OPD patients/wk (in quartiles)
1. Ethiopia Medium Clinic	200	④
2. Bhir Dar Medium Clinic	140	③
3. Gamby HC	980	④
4. Jerusalem HC	280	④
5. K/Mihret HC	490	④
6. Beza HC	105	②
7. Agm.sec Medium Clinic	**	**
8. Metekel HC	140	③
9. Universal Medium Clinic	210	④
10. Hiwot Medium Clinic	210	④
11. Damot Medium Clinic	90	②
12. Hayat Medium Clinic	105	②
13. Shebele Medium Clinic	140	③
14. Dr.Lealem Medium Clinic	35	①
15. Markos Medium Clinic	105	②
16. Sr.John Higher MC	175	③
17. ALEM-SAGA HC	350	④
18. Jeyenesalem HC	105	②
19. Dilenesa Medium Clinic	38	①
20. Kidus Georgis HC	315	④
21. Amanuuel Medium Clinic	70	②
22. Nur HC	140	③
23. Hiwot Medium Clinic	14	①
24. Brehantesfa Medium Clinic	105	②
25. Shehedi Medium Clinic	35	①
26. Medehanlem Medium Clinic	4	①
27. St.Mariam Medium Clinic	19	①
28. Selema Medium Clinic	42	①
29. Stadium Medium Clinic	140	③
30. Kedus Gebrael H Clinic	175	③
31. Ledeta Mulu Medium Clinic	14	①
32. Hayat Medium Clinic	49	①
33. Gonder HC	350	④
34. Universal Medium Clinic	70	②
35. Meneharia HC	140	③
36. Selam Medium Clinic	140	③
37. Adam Medium Clinic	60	①
38. Tensae Medium Clinic	105	②
39. Ethiopia Medium Clinic	35	①
40. Ateya Medium Clinic	105	②
41. Dr.Teklewoin S.HClinic	10	①
42. Teferi Memorial M.Clinic	150	③
43. Dr.Amir HC	280	④
44. Ruh Medium Clinic	60	①
45. Bati G.Hospital	370	④
46. Shalom Medium Clinic	110	③
47. Ethio G.Hospital	420	④
48. Selam HC	420	④
49. Wollo HC	150	③
50. Hayat Medium Clinic	210	④
51. Hiwot Fana HC	100	②
52. Yefat Medium Clinic	70	②
53. Alpha Medium Clinic	70	②
54. Brook HC	420	④
55. Hiberet Medium Clinic	50	①
56. Saleh Medium Clinic	90	②

Name of facility	OPD patients/wk	OPD patients/wk (in quartiles)
57. Gelila Medium Clinic	140	③
58. Showa Poly Medium Clinic	140	③

①= First quartile (<100/wk)
 ②= Second quartile (100-120/wk)
 ③= Third quartile (121-224/wk)
 ④= Top quartile (>224/wk)

TABLE B-7. AVAILABILITY OF GUIDELINES AND PROTOCOLS (AMHARA REGION, N=58)

Name of facility	TB	TB/ HIV	HCT	ART	STI	Clinical manage ment of HIV & OI	PIHCT	AFB & HIV test lab manuals
1. Ethiopia Medium Clinic	✓	✓						**
2. Bhir Dar Medium Clinic					**	**	**	**
3. Gamby HC	✓	✓	✓	✓	✓	✓		**
4. Jerusalem HC	✓	✓	✓	✓	✓	✓		✓
5. K/Mihret HC	✓	✓	**	**	✓	✓	✓	**
6. Beza HC								
7. Agm.sec Medium Clinic	**	**	**	**	**	**	**	**
8. Metekel HC	✓	✓						✓
9. Universal Medium Clinic	✓	✓			**	**	**	
10. Hiwot Medium Clinic	✓	✓						
11. Damot Medium Clinic	✓					✓		✓
12. Hayat Medium Clinic	✓				✓			✓
13. Shebele Medium Clinic								
14. Dr.Lealem Medium Clinic	✓				✓			
15. Markos Medium Clinic	✓	✓			✓			✓
16. Sr.John Higher MC	✓	✓	✓	✓	✓	✓	✓	✓
17. ALEM-SAGA HC	✓	✓			✓	✓		
18. Jeyenesalem HC			**				**	✓
19. Dilenesa Medium Clinic	✓							
20. Kidus Georgis HC	✓		**					
21. Amanuuel Medium Clinic	✓							
22. Nur HC	✓				✓			
23. Hiwot Medium Clinic								
24. Brehantesfa Medium Clinic	✓		✓	✓	✓			✓
25. Shehedi Medium Clinic	✓	✓		✓		✓	✓	
26. Medehanlem Medium Clinic	✓		✓	✓	✓	✓		✓
27. St.Mariam Medium Clinic	✓				✓			
28. Selema Medium Clinic					✓	✓	✓	
29. Stadium Medium Clinic					✓			✓
30. Kedus Gebrael HC	✓				✓			
31. Ledeta Mulu Medium Clinic	✓							✓
32. Hayat Medium Clinic								
33. Gonder HC	✓	✓	✓	✓	✓	✓	✓	✓
34. Universal Medium Clinic	✓	✓	✓		✓			✓
35. Meneharia HC								
36. Selam Medium Clinic	✓				✓			
37. Adam Medium Clinic	✓				✓			✓
38. Tensae Medium Clinic					✓			
39. Ethiopia Medium Clinic								
40. Ateya Medium Clinic	✓		✓		✓			✓
41. Dr.Teklewoin S.HC								
42. Teferi Memorial M.Clinic								
43. Dr.Amir HC								
44. Ruh Medium Clinic								
45. Bati G.Hospital	**	**	**	**	**	**	**	**
46. Shalom Medium Clinic	**	**	**	**	**	**	**	**
47. Ethio G.Hospital								
48. Selam HC			✓					
49. Wollo HC								
50. Hayat Medium Clinic	**	**	**	**	**	**	**	**
51. Hiwot Fana HC	**	**	**	**	**	**	**	**
52. Yefat Medium Clinic	**	**	**	**	**	**	**	**

Name of facility	TB	TB/ HIV	HCT	ART	STI	Clinical manage ment of HIV & OI	PIHCT	AFB & HIV test lab manuals
53. Alpha Medium Clinic	**	**	**	**	**	**	**	**
54. Brook HC	**	**	**	**	**	**	**	**
55. Hiberet Medium Clinic								
56. Saleh Medium Clinic	✓	✓		✓				
57. Gelila Medium Clinic	**	**	**	**	**	**	**	**
58. Showa Poly Medium Clinic								

✓= Yes; Blank=No; **= Data not available

TABLE B-8. RECORDING AND REPORTING BY THE HEALTH FACILITIES (AMHARA REGION, N=58)

Name of facility	Availability of data clerk	Regular recording and compilation	Regular reporting to one of these: RHB/ZHD/WoHO
1. Ethiopia Medium Clinic		✓	
2. Bhir Dar Medium Clinic			
3. Gamby HC		✓	✓
4. Jerusalem HC			✓
5. K/Mihret HC			✓
6. Beza HC			
7. Agm.sec Medium Clinic			
8. Metekel HC			✓
9. Universal Medium Clinic		✓	
10. Hiwot Medium Clinic			✓
11. Damot Medium Clinic			✓
12. Hayat Medium Clinic			✓
13. Shebele Medium Clinic		✓	✓
14. Dr.Lealem Medium Clinic			
15. Markos Medium Clinic		✓	✓
16. Sr.John Higher MC		✓	
17. ALEM-SAGA HC	✓	✓	✓
18. Jeyenesalem HC		✓	✓
19. Dilenesa Medium Clinic			✓
20. Kidus Georgis HC			✓
21. Amanuuel Medium Clinic		✓	✓
22. Nur HC	✓	✓	✓
23. Hiwot Medium Clinic	✓	✓	
24. Brehantesfa Medium Clinic	✓	✓	✓
25. Shehedi Medium Clinic		✓	
26. Medehanlem Medium Clinic	✓	✓	✓
27. St.Mariam Medium Clinic		✓	
28. Selema Medium Clinic		✓	
29. Stadium Medium Clinic	✓	✓	✓
30. Kedus Gebrael H Clinic		✓	
31. Ledeta Mulu Medium Clinic	✓	✓	✓
32. Hayat Medium Clinic		✓	
33. Gonder HC		✓	✓
34. Universal Medium Clinic	✓	✓	✓
35. Meneharia HC		✓	
36. Selam Medium Clinic	✓	✓	
37. Adam Medium Clinic	✓	✓	
38. Tensae Medium Clinic	✓	✓	
39. Ethiopia Medium Clinic		✓	✓
40. Ateya Medium Clinic		✓	
41. Dr.Teklewoin S.H Clinic		✓	✓
42. Teferi Memorial M.Clinic		✓	✓
43. Dr.Amir HC		✓	✓
44. Ruh Medium Clinic		✓	✓
45. Bati G.Hospital		✓	✓
46. Shalom Medium Clinic		✓	✓
47. Ethio G.Hospital		✓	✓
48. Selam HC			✓
49. Wollo HC		✓	✓
50. Hayat Medium Clinic		✓	✓
51. Hiwot Fana HC		✓	✓
52. Yefat Medium Clinic			✓
53. Alpha Medium Clinic		✓	✓
54. Brook HC		✓	✓

Name of facility	Availability of data clerk	Regular recording and compilation	Regular reporting to one of these: RHB/ZHD/WoHO
55. Hiberet Medium Clinic		✓	✓
56. Saleh Medium Clinic			
57. Gelila Medium Clinic		✓	✓
58. Showa Poly Medium Clinic			

✓= Yes; Blank=No; **= Data not available

TABLE B-9. WILLINGNESS OF THE HEALTH FACILITIES FOR FUTURE INVOLVEMENT IN TB/HIV SERVICE PROVISION (AMHARA REGION, N=58)

Name of facility	Willingness to avail ≥ 3 health workers for training	Availability of trained staff that can be assigned to work on DOTS	Ability to handle logistics on PPM-DOTS
1. Ethiopia Medium Clinic	✓	**	✓
2. Bhir Dar Medium Clinic	✓	**	✓
3. Gamby HC	✓		✓
4. Jerusalem HC	✓	**	✓
5. K/Mihret HC	✓		✓
6. Beza HC	✓		
7. Agm.sec Medium Clinic	**	**	**
8. Metekel HC	✓		✓
9. Universal Medium Clinic	✓		✓
10. Hiwot Medium Clinic	✓	**	✓
11. Damot Medium Clinic	✓		✓
12. Hayat Medium Clinic	✓		
13. Shebele Medium Clinic	✓		✓
14. Dr.Lealem Medium Clinic	✓		✓
15. Markos Medium Clinic	✓		✓
16. Sr.John Higher MC	✓		✓
17. ALEM-SAGA HC	✓	**	✓
18. Jeyenesalem HC	✓		
19. Dilenesa Medium Clinic	✓		✓
20. Kidus Georgis HC	✓	**	✓
21. Amanuuel Medium Clinic			
22. Nur HC	✓		✓
23. Hiwot Medium Clinic	✓		✓
24. Brehantesfa Medium Clinic	✓		
25. Shehedi Medium Clinic	✓		✓
26. Medehanlem Medium Clinic	✓		✓
27. St.Mariam Medium Clinic	✓		✓
28. Selema Medium Clinic	✓		✓
29. Stadium Medium Clinic	✓		✓
30. Kedus Gebrael H Clinic	✓		✓
31. Ledeta Mulu Medium Clinic	✓		✓
32. Hayat Medium Clinic	✓		✓
33. Gonder HC	✓		✓
34. Universal Medium Clinic	✓		✓
35. Meneharia HC	✓		✓
36. Selam Medium Clinic	✓		✓
37. Adam Medium Clinic	✓		✓
38. Tensae Medium Clinic	✓		**
39. Ethiopia Medium Clinic	✓		✓
40. Ateya Medium Clinic	✓	✓	✓
41. Dr.Teklewain S.H Clinic	✓		✓
42. Teferi Memorial M.Clinic	✓		✓
43. Dr.Amir HC	✓		✓
44. Ruh Medium Clinic	✓		✓
45. Bati G.Hospital	✓	✓	✓
46. Shalom Medium Clinic	✓		✓
47. Ethio G.Hospital	✓	✓	✓
48. Selam HC	✓		✓
49. Wollo HC	✓		✓
50. Hayat Medium Clinic	✓		✓
51. Hiwot Fana HC	✓		
52. Yefat Medium Clinic			

Name of facility	Willingness to avail ≥ 3 health workers for training	Availability of trained staff that can be assigned to work on DOTS	Ability to handle logistics on PPM-DOTS
53. Alpha Medium Clinic	✓		
54. Brook HC	✓		✓
55. Hiberet Medium Clinic	✓		
56. Saleh Medium Clinic	✓		
57. Gelila Medium Clinic	**	**	**
58. Showa Poly Medium Clinic	**	**	**

✓= Yes; Blank=No; **= Data not available

ANNEX C. DATA TABLES, OROMIA REGION

TABLE C-I. PRIVATE HEALTH FACILITIES SELECTED FOR HCT AND DOTS SERVICES, OROMIA REGION, 2007 (UNFULFILLED CRITERIA SHADED)

Name of facility	Ventilation	Space for DOTS	Space for HCT	Doctors (①= 1; ②= 2 or more)	Nurses (①= 1; ②= 2 or more)	Lab tech (①= 1; ②= 2 or more)	Willingness to avail ≥ 3 HW for training	# of OPD patients/wk*	Total # of criteria fulfilled (Key: ⑥= 6/8 ⑦=7/8 ⑧=8/8)
1. Addis Hiwot Medium Clinic	√	√	√	①	①	①	√	③	⑧
2. Addis Hiwot HC	√	√	√	①	②	①	√	③	⑧
3. Darimu Poly HC	√	√	√	①	①	①	√	①	⑦
4. Goma Medium Clinic	√	√	√	**	①	①	√	②	⑦
5. Beley Medium Clinic	√	√	√	①	②	①	√	④	⑧
6. Dr. Habetamu (Africa) MC	√	√	√	①	②	②	√	④	⑧
7. Dr.Geda Medium Clinic	√	√	√	①	①	①	√	②	⑧
8. Abdi Bole Medium Clinic	√	√	√	①	**	①	√	②	⑦
9. Jorgo Medium Clinic	√	√	√	①	②	②	√	①	⑦
10. Dr.Chali Fidadu M.Clinic	√	√	√	②	①	①	√	①	⑦
11. Gutu Medium Clinic	√	√	√	①	②	①	√	②	⑧
12. Nekemet Medical Center	√	√	√	②	②	①	√	④	⑧
13. National Medical Center	√	√	√	①	①	①	√	③	⑧
14. Gibe Poly Medium Clinic	√	√	√	①	①	①	√	①	⑦
15. Ambo Poly HC	√	√	√	②	②	②	√	④	⑧
16. Adonay Medium Clinic	√	√	√	①	①	②	√	④	⑧
17. Holeta medical M.Center	√	√	√	①	②	②	√	④	⑧
18. Medhanialem H/Clinic	√	√	√	①	②	②	√	②	⑧
19. Eshetu Medium Clinic	√	√	√	①	①	①	√	①	⑦
20. Noah Medium Clinic	√	√	√	①	①	①	√	③	⑧
21. Kidues Medium Clinic	√			①	①	①	√	②	⑥
22. Addis Medium Clinic	√	√	√	①	②	①	√	①	⑦
23. Tesfa Medium Clinic	√	√	√	①	②	①	√	④	⑧
24. Awash HC	√	√	√	②	②	②	√	③	⑧
25. Hiberet HC	√	√	√	②	①	②	√	④	⑧
26. Tropical Medium Clinic	√	√	√	①	**	①	√	④	⑦
27. Bilen HC	√		√	②	①	①	**	②	⑥
28. Asela HC	√	√	√	②	②	①	√	④	⑧
29. Amanuael G/Hospital	√	√	√	①	②	①	**	②	⑦
30. Dukum Medium Clinic	√	√	√	①	②	①	√	②	⑧
31. Gizaw HC	√	√	√	②	②	①	√	④	⑧
32. Universal Medium Clinic	√	√	√	①	②	②	√	③	⑧
33. Assasuman Sofumer HC	√	√	√	②	②	②	√	④	⑧
34. Koket Medium Clinic	√	√		①	①	①	√	②	⑦
35. Hora Medium Clinic	√	√	√	②	②	②	√	②	⑧

Name of facility	Ventilation	Space for DOTS	Space for HCT	Doctors (①= 1; ②= 2 or more)	Nurses (①= 1; ②= 2 or more)	Lab tech (①= 1; ②= 2 or more)	Willingness to avail ≥ 3 HW for training	# of OPD patients/wk*	Total # of criteria fulfilled (Key: ⑥= 6/8 ⑦=7/8 ⑧=8/8)
36. Edo Medium Clinic	√	√		①	①	①	√	⑤	⑦
37. Adea Medium Clinic	√	√	√	①	②	①	√	④	⑧
38. Global HC	√	√	√	①	①	①	√	②	⑧
39. Sama Senbet H/Clinic	√		√	②	②	②	√	④	⑦
40. Feyta HC	√		√	②	②	②	√	⑤	⑦

√= Yes; Blank=No; **= Data not available

①= First quartile (<70/wk)

②= Second quartile (70-105/wk)

③= Third quartile (106-194/wk)

④= Top quartile (>195/wk)

TABLE C-2. PROFILE OF NUMBER OF HEALTH WORKERS (OROMIA REGION, N=88)

Name of facility	# doctors	# nurses	# lab technicians	# pharmacy technicians
1. Gebie Medium Clinic	1	2	2	**
2. Amanual Medium Clinic	**	1	1	**
3. Beteseb Medium Clinic	1	1	1	**
4. Dr.Alemeneh Medium Clinic	1	1	1	**
5. Chora Medium Clinic	**	1	1	**
6. Dr.Gerbi Medium Clinic	1	1	1	**
7. Welliso Medium Clinic	1	1	1	**
8. Meta Abo Medium Clinic	**	1	1	**
9. Oda Medium Clinic	**	1	1	**
10. Dr.Feye Medium Clinic	1	2	1	**
11. Addis Hiwot Medium Clinic	1	1	1	**
12. Addis Hiwot HC	1	2	1	**
13. Darimu Poly HC	1	1	1	**
14. Goma Medium Clinic	**	1	1	**
15. Beley Medium Clinic	1	2	1	**
16. Gine HC	2	1	1	**
17. Dr Hile HC	1	2	2	**
18. Dr. Habetamu M.Clinic	1	2	2	**
19. Semele Medium Clinic	1	1	1	**
20. Boniat Medium Clinic	**	2	1	**
21. AWONI Medium Clinic	1	1	1	1
22. Dr.Geda Medium Clinic	1	1	1	**
23. Abdi Bole Medium Clinic	1	**	1	1
24. Abinezzer Medium Clinic	**	1	1	**
25. Jorgo Medium Clinic	1	2	2	1
26. Dr.Chali Fidadu Medium Clinic	2	1	1	1
27. Dr.Fantahun Medium Clinic	1	1	1	**
28. Medihen Medium Clinic	**	1	1	**
29. Mayo Medium Clinic	1	**	1	**
30. Gutu Medium Clinic	1	2	1	**
31. Nekemet Medical Center	2	2	1	**
32. Gelele Medium Clinic	1	1	1	**
33. National Medical Center	1	1	1	**
34. Dembele Medium Clinic	**	1	1	**
35. Shawa Medium Clinic	**	1	1	**
36. Gibe Poly Medium Clinic	1	1	1	**
37. Ambo Poly HC	2	2	2	1
38. Fasica Medium Clinic	1	1	1	**
39. Jibat Medium Clinic	1	1	1	1
40. Adonay Medium Clinic	1	1	2	1
41. Holeta Medical Center	1	2	2	2
42. Medhanialem HC	1	2	2	1
43. Dibora Medium Clinic	**	2	2	**
44. Kookee Medium Clinic	**	1	1	**
45. Adaba Medium Clinic	**	2	1	**
46. Kidanmiheret Medium Clinic	**	1	1	1
47. Eshetu Medium Clinic	1	1	1	**
48. Noah Medium Clinic	1	1	1	**
49. Kidues Medium Clinic	1	1	1	1
50. Addis Medium Clinic	1	2	1	**
51. Milliki Medium Clinic	**	1	1	**
52. Tesfa Medium Clinic	1	2	1	**
53. Awash HC	2	2	2	**
54. Hiberet HC	2	1	2	**
55. Tropical Medium Clinic	1	**	1	**

Name of facility	# doctors	# nurses	# lab technicians	# pharmacy technicians
56. Bilen HC	②	①	①	**
57. Asela HC	②	②	①	**
58. DMC_2 HC	①	②	①	**
59. Abdi Feyta Medium Clinic	①	①	①	**
60. Yenazreth Medium Clinic	①	②	②	**
61. Urael Medium Clinic	**	①	①	**
62. Shoa Medium Clinic	①	②	①	**
63. Amanuael General Hospital	①	②	①	**
64. St. Rufael Medium Clinic	①	①	①	**
65. Dukum Medium Clinic	**	**	**	**
66. Gizaw HC	②	②	①	**
67. Universal Medium Clinic	①	②	②	**
68. Assasuman Sofumer HC	②	②	②	**
69. Koket Medium Clinic	①	①	①	**
70. Hora Medium Clinic	②	②	②	**
71. Edo Medium Clinic	①	①	①	**
72. Adea Medium Clinic	①	②	①	**
73. Global HC	①	①	①	**
74. Sama Senbet HC	②	②	②	**
75. Afiya Medium Clinic	①	**	②	**
76. Feyta HC	②	②	②	**
77. Dagim Medium Clinic	①	②	①	**
78. Dr. Hanim Poly M/Clinic	①	①	①	**
79. Oliyad Medium Clinic	**	①	①	①
80. Addisu Poly Medium Clinic	①	①	①	**
81. Amakelech Medium Clinic	**	**	①	**
82. Share Hospital	②	②	②	②
83. Kidane Miharet M/Clinic	**	①	①	**
84. Dr.Habtamu Medical Center	①	①	①	**
85. Family Medium Clinic	①	①	①	**
86. Arsi Negele Poly Medium Clinic	①	①	①	**
87. Kohobol Medium Clinic	①	①	①	**
88. Family Medium Clinic	②	**	①	**

**= Data not available; ①=nil; ①= 1; ②= 2 or more

TABLE C-3. EVALUATION OF FACILITY LICENSE AND INFRASTRUCTURE (OROMIA REGION, N=88)

Name of Facility	Valid license	Well illuminated	Well ventilated	Has space for DOTS	Has space for HCT	Facility meets standard
1. Gebie Medium Clinic	✓	✓	✓			✓
2. Amanual Medium Clinic	✓	✓	✓	✓		✓
3. Beteseb Medium Clinic	✓	✓	✓			
4. Dr.Alemeneh Medium Clinic		✓	✓	✓		✓
5. Chora Medium Clinic	✓	✓	✓	✓		✓
6. Dr.Gerbi Medium Clinic		✓	✓	✓	✓	✓
7. Welliso Medium Clinic	✓	✓	✓			✓
8. Meta Abo Medium Clinic	✓	✓	✓	✓	✓	✓
9. Oda Medium Clinic		✓	✓	✓	✓	✓
10. Dr.Feye Medium Clinic		✓	✓	✓	✓	✓
11. Addis Hiwot Medium Clinic		✓	✓	✓	✓	✓
12. Addis Hiwot Higher Clinic	✓	✓	✓	✓	✓	✓
13. Darimu Poly Higher Clinic	✓	✓	✓	✓	✓	✓
14. Goma Medium Clinic	✓	✓	✓	✓	✓	✓
15. Beley Medium Clinic	✓	✓	✓	✓	✓	✓
16. Gine Higher Clinic	✓	✓	✓	✓	✓	✓
17. Dr Hile Higher Clinic		✓	✓	✓	✓	✓
18. Dr. Habetamu M.Clinic	✓	✓	✓	✓	✓	✓
19. Semele Medium Clinic	✓	✓	✓	✓	✓	✓
20. Boniat Medium Clinic			✓	✓	✓	
21. AWONI Medium Clinic	✓	✓	✓	✓	✓	✓
22. Dr.Geda Medium Clinic	✓	✓	✓	✓	✓	✓
23. Abdi Bole Medium Clinic	✓	✓	✓	✓	✓	✓
24. Abinezer Medium Clinic	✓	✓	✓	✓	✓	✓
25. Jorgo Medium Clinic	✓	✓	✓	✓	✓	✓
26. Dr.Chali Fidadu M.Clinic	✓	✓	✓	✓	✓	✓
27. Dr.Fantahun Medium Clinic	✓	✓	✓	✓	✓	✓
28. Medihen Medium Clinic	✓	✓	✓	✓	✓	✓
29. Mayo Medium Clinic	✓	✓	✓	✓	✓	✓
30. Gutu Medium Clinic	✓	✓	✓	✓	✓	✓
31. Nekemet Medical Center	✓	✓	✓	✓	✓	✓
32. Gelele Medium Clinic	✓	✓	✓	✓	✓	✓
33. National Medical Center	✓	✓	✓	✓	✓	✓
34. Dembele Medium Clinic	✓	✓	✓	✓	✓	✓
35. Shawa Medium Clinic	✓	✓	✓	✓	✓	✓
36. Gibe Poly Medium Clinic	✓	✓	✓	✓	✓	✓
37. Ambo Poly Higher Clinic	✓	✓	✓	✓	✓	✓
38. Fasica Medium Clinic	✓	✓	✓			
39. Jibat Medium Clinic	✓	✓	✓	✓	✓	✓
40. Adonay Medium Clinic	✓	✓	✓	✓	✓	✓
41. Holeta Medical Center	✓	✓	✓	✓	✓	✓
42. Medhanialem Higher Clinic	✓	✓	✓	✓	✓	✓
43. Dibora Medium Clinic	✓	✓	✓	✓	✓	✓
44. Kookee Medium Clinic		✓	✓			
45. Adaba Medium Clinic	✓	✓	✓			
46. Kidanmiheret Medium Clinic	✓	✓	✓			
47. Eshetu Medium Clinic	✓	✓	✓	✓	✓	✓
48. Noah Medium Clinic	✓	✓	✓	✓	✓	
49. Kidues Medium Clinic	✓	✓	✓		**	
50. Addis Medium Clinic	✓	✓	✓	✓	✓	
51. Milliki Medium Clinic	✓	✓	✓	✓	✓	
52. Tesfa Medium Clinic	✓	✓	✓	✓	✓	
53. Awash Higher Clinic	✓	✓	✓	✓	✓	

Name of Facility	Valid license	Well illuminated	Well ventilated	Has space for DOTS	Has space for HCT	Facility meets standard
54. Hiberet Higher Clinic	✓		✓	✓	✓	
55. Tropical Medium Clinic	✓		✓	✓	✓	
56. Bilen Higher Clinic	✓		✓		✓	
57. Asela Higher Clinic	✓		✓	✓	✓	
58. DMC_2 Higher Clinic			✓	✓	✓	
59. Abdi Feya Medium Clinic	✓		✓	✓	✓	
60. Yenazreth Medium Clinic	✓		✓	✓	✓	
61. Urael Medium Clinic	✓		✓			
62. Shoa Medium Clinic	✓		✓		✓	
63. Amanuael General Hospital			✓	✓	✓	
64. St. Rufael Medium Clinic	✓		✓	✓	✓	
65. Dukum Medium Clinic	✓	✓	✓	✓	✓	✓
66. Gizaw Higher Clinic	✓	✓	✓	✓	✓	✓
67. Universal Medium Clinic	✓	✓	✓	✓	✓	✓
68. Assasuman Sofumer HC		✓	✓	✓	✓	
69. Koket Medium Clinic	✓	✓	✓	✓		✓
70. Hora Medium Clinic	✓	✓	✓	✓	✓	✓
71. Edo Medium Clinic	✓	✓	✓	✓		
72. Adea Medium Clinic		✓	✓	✓	✓	✓
73. Global Higher Clinic	✓	✓	✓	✓	✓	✓
74. Sama Senbet Higher Clinic	✓	✓	✓		✓	✓
75. Afiya Medium Clinic	✓	✓	✓	✓		✓
76. Feya Higer Clinic	✓	✓	✓		✓	
77. Dagim Medium Clinic	✓	✓	✓			
78. Dr. Hanim Poly M/Clinic	✓	✓	✓	✓		
79. Oliyad Medium Clinic	✓	✓	✓			
80. Addisu Poly Medium Clinic	✓	✓	✓	✓	✓	✓
81. Amakelech Medium Clinic	✓	✓	✓			
82. Share Hospital	✓	✓	✓	✓	✓	✓
83. Kidane Miheret M/Clinic	✓	✓	✓	✓		✓
84. Dr.Habtamu Medical Center	✓	✓	✓	✓		✓
85. Family Medium Clinic	✓	✓	✓			
86. Arsi Negele Poly M/Clinic	✓	✓	✓			
87. Kohobol Medium Clinic	✓	✓	✓	✓		
88. Family Medium Clinic		✓	✓	✓		

✓ = Yes; Blank=No; **= Data Not Available

TABLE C-4. AVAILABILITY OF EQUIPMENT AND SUPPLIES (OROMIA REGION, N=88)

Name of facility	Microscope	HIV test kits	Reagents for AFB	Detergents & disinfect-ants	Refrigerator	Slides	Sputum cup	Test tubes
1. Gebie Medium Clinic	✓	**	✓	✓	✓	✓		✓
2. Amanual Medium Clinic	✓		✓	✓	✓	✓	✓	✓
3. Beteseb Medium Clinic	✓	**	✓	✓	✓	✓	✓	✓
4. Dr.Alemeneh Medium Clinic	✓		✓	✓	✓	✓	✓	✓
5. Chora Medium Clinic	✓		✓	**		✓	✓	✓
6. Dr.Gerbi Medium Clinic	✓	**	✓	✓	✓	✓		✓
7. Welliso Medium Clinic	✓	**	✓	✓	✓	✓		✓
8. Meta Abo Medium Clinic	✓	**	✓	✓	✓	✓	✓	✓
9. Oda Medium Clinic	✓	**	✓	✓	✓	✓		✓
10. Dr.Feye Medium Clinic	✓		✓	✓	✓	✓	✓	✓
11. Addis Hiwot Medium Clinic	✓		✓	✓	✓	✓	✓	✓
12. Addis Hiwot HC	✓	**	✓	✓	✓	✓	✓	✓
13. Darimu Poly HC	✓		✓	✓	✓	✓		✓
14. Goma Medium Clinic	✓		✓	✓	✓	✓	✓	✓
15. Beley Medium Clinic	✓	**	✓	✓	✓	✓		✓
16. Gine HC	✓		✓	✓	✓	✓	✓	✓
17. Dr Hile HC	✓		✓	✓	✓	✓	✓	✓
18. Dr. Habetamu Medium Clinic	✓		✓	✓	✓	✓		✓
19. Semele Medium Clinic	✓		✓	✓	✓	✓		✓
20. Boniat Medium Clinic	✓		✓	✓		✓		✓
21. AWONI Medium Clinic		✓	✓			✓	✓	✓
22. Dr.Geda Medium Clinic	✓		✓	✓	✓	✓	✓	✓
23. Abdi Bole Medium Clinic	✓		✓	✓	✓	✓		✓
24. Abinezer Medium Clinic	✓			✓		✓		✓
25. Jorgo Medium Clinic	✓		✓	✓	✓	✓	✓	✓
26. Dr.Chali Fidadu Medium Clinic	✓	**	✓	✓	✓	✓	✓	✓
27. Dr.Fantahun Medium Clinic	✓		✓	✓	✓	✓	✓	✓
28. Medihen Medium Clinic	✓		✓	✓	✓	✓		✓
29. Mayo Medium Clinic	✓		✓	✓	✓	✓		✓
30. Gutu Medium Clinic	✓		✓	✓	✓	✓		✓
31. Nekemet Medical Center	✓		✓	✓	✓	✓	✓	✓
32. Gelele Medium Clinic	✓		✓	✓		✓	✓	✓
33. National Medical Center	✓		✓	✓	✓	✓	✓	✓
34. Dembele Medium Clinic	✓		✓	✓	✓	✓	✓	✓
35. Shawa Medium Clinic	✓	✓	✓	✓	✓	✓	✓	✓
36. Gibe Poly Medium Clinic	✓		✓	✓	✓	✓		✓
37. Ambo Poly HC	✓	✓	✓	✓	✓	✓	✓	✓
38. Fasica Medium Clinic	✓		✓	✓	✓	✓	✓	✓
39. Jibat Medium Clinic	✓		✓	✓	✓	✓	✓	✓
40. Adonay Medium Clinic	✓		✓	✓	✓	✓	✓	✓
41. Holeta Medical Center	✓			✓	✓	✓	✓	✓
42. Medhanialem HC	✓	✓	✓	✓	✓	✓	✓	✓
43. Dibora Medium Clinic	✓		✓	✓	✓	✓	✓	✓
44. Kookee Medium Clinic	✓		✓	✓		✓		✓
45. Adaba Medium Clinic	✓	✓	✓	✓		✓		✓
46. Kidanmiheret Medium Clinic	✓		✓	✓	✓	✓		✓
47. Eshetu Medium Clinic	✓		✓	✓	✓	✓	✓	✓
48. Noah Medium Clinic	✓		✓	✓	✓	✓	✓	✓
49. Kidues Medium Clinic	✓		✓	✓	✓	✓	✓	✓
50. Addis Medium Clinic	✓		✓	✓	✓	✓		✓
51. Milliki Medium Clinic	✓		✓	✓	✓	✓		✓
52. Tesfa Medium Clinic	✓		✓	✓	✓	✓		✓
53. Awash HC	✓		✓	✓	✓	✓	✓	✓

Name of facility	Microscope	HIV test kits	Reagents for AFB	Detergents & disinfect-ants	Refrigerator	Slides	Sputum cup	Test tubes
54. Hiberet HC	✓		✓	✓	✓	✓	✓	✓
55. Tropical Medium Clinic	✓		✓	✓	✓	✓	✓	✓
56. Bilen HC	✓		✓		✓	✓	✓	✓
57. Asela HC	✓		✓	✓	✓	✓		✓
58. DMC_2 HC	✓		✓	✓	✓	✓	✓	✓
59. Abdi Feyta Medium Clinic	✓		✓	✓	✓	✓		✓
60. Yenazreth Medium Clinic	✓		✓	✓	✓	✓	✓	✓
61. Urael Medium Clinic	✓		✓	✓	✓	✓	✓	✓
62. Shoa Medium Clinic	✓		✓	✓	✓	✓		✓
63. Amanuael General Hospital	✓	**	**	**	✓	✓	✓	✓
64. St. Rufael Medium Clinic	✓		✓	✓	✓	✓		✓
65. Dukum Medium Clinic	✓		✓	✓	✓	✓		✓
66. Gizaw HC	✓		✓	✓	✓	✓	✓	✓
67. Universal Medium Clinic	✓	✓	✓	✓	✓	✓	✓	✓
68. Assasuman Sofumer HC	✓	✓	✓	✓	✓	✓	✓	✓
69. Koket Medium Clinic	✓		✓	✓	✓	✓	✓	✓
70. Hora Medium Clinic	✓		✓	✓	✓	✓	✓	✓
71. Edo Medium Clinic	✓		✓	✓	✓	✓	✓	✓
72. Adea Medium Clinic	✓		✓	✓	✓	✓	✓	✓
73. Global HC	✓		✓	✓	✓	✓		✓
74. Sama Senbet HC	✓	✓	✓	✓		✓	✓	✓
75. Afiya Medium Clinic	✓		✓	✓	✓	✓	✓	✓
76. Feyta HC	✓	✓	✓	✓	✓	✓	✓	✓
77. Dagim Medium Clinic	✓		✓	✓	✓	✓	✓	✓
78. Dr. Hanim Poly M/Clinic	✓		✓	✓	✓	✓	✓	✓
79. Oliyad Medium Clinic	✓		✓	✓	✓	✓	✓	✓
80. Addisu Poly Medium Clinic	✓		✓	✓	✓	✓	✓	✓
81. Amakelech Medium Clinic	✓		✓	✓	✓	✓	✓	✓
82. Share Hospital	✓		✓	✓	✓	✓	✓	✓
83. Kidane Miheret Medium Clinic	✓		✓	✓	✓	✓	✓	✓
84. Dr. Habtamu Medical Center	✓		✓	✓	✓	✓	✓	✓
85. Family Medium Clinic	✓	✓	✓	✓	✓	✓	✓	✓
86. Arsi Negele Poly Medium Clinic	✓		✓	✓	✓	✓	✓	✓
87. Kohobol Medium Clinic	✓		✓	✓	✓	✓	✓	✓
88. Family Medium Clinic	✓		✓	✓	✓	✓	✓	✓

✓= Yes; Blank=No; **= Data not available

TABLE C-5. AVAILABILITY OF BASIC SERVICES IN THE HEALTH FACILITY (OROMIA REGION, N=88)

Name of facility	HCT	ART	OI/STI	PMTCT	TB	Maternal health	FP/RH	Child health	ANC	Lab
1. Gebie Medium Clinic								✓		✓
2. Amanual Medium Clinic								✓		✓
3. Beteseb Medium Clinic							✓	✓	✓	✓
4. Dr.Alemeneh Medium Clinic						✓	✓	✓	✓	✓
5. Chora Medium Clinic							✓	✓		✓
6. Dr.Gerbi Medium Clinic										✓
7. Welliso Medium Clinic							✓	✓	✓	✓
8. Meta Abo Medium Clinic							✓	✓	✓	✓
9. Oda Medium Clinic						✓	✓	✓	✓	✓
10. Dr. Feye Medium Clinic							✓	✓	✓	✓
11. Addis Hiwot Medium Clinic							✓	✓	✓	✓
12. Addis Hiwot HC						✓	✓	✓	✓	✓
13. Darimu Poly HC							✓	✓	✓	✓
14. Goma Medium Clinic							✓	✓	✓	✓
15. Beley Medium Clinic							✓	✓	✓	✓
16. Gine HC						✓	✓	✓	✓	✓
17. Dr Hile HC							✓	✓	✓	✓
18. Dr. Habetamu Medium Clinic							✓	✓	✓	✓
19. Semele Medium Clinic							✓	✓	✓	✓
20. Boniat Medium Clinic									✓	✓
21. AWONI Medium Clinic	✓					✓	✓	✓	✓	✓
22. Dr.Geda Medium Clinic					✓	✓	✓	✓	✓	✓
23. Abdi Bole Medium Clinic	✓				✓	✓	✓	✓	✓	✓
24. Abinezzer Medium Clinic							✓	✓	✓	✓
25. Jorgo Medium Clinic					✓	✓	✓	✓	✓	✓
26. Dr.Chali Fidadu Medium Clinic	✓				✓	✓	✓	✓	✓	✓
27. Dr.Fantahun Medium Clinic					✓	✓	✓	✓	✓	✓
28. Medihen Medium Clinic					✓		✓	✓	✓	✓
29. Mayo Medium Clinic					✓			✓		✓
30. Gutu Medium Clinic					✓			✓		✓
31. Nekemet Medical Center					✓	✓	✓	✓	✓	✓
32. Gelele Medium Clinic					✓		✓	✓		✓
33. National Medical Center	✓		✓		✓	✓	✓	✓	✓	✓
34. Dembele Medium Clinic					✓		✓	✓	✓	✓
35. Shawa Medium Clinic	✓			✓	✓	✓	✓	✓	✓	✓
36. Gibe Poly Medium Clinic					✓		✓	✓	✓	✓
37. Ambo Poly HC	✓				✓	✓	✓	✓	✓	✓
38. Fasica Medium Clinic					✓		✓	✓	✓	✓
39. Jibat Medium Clinic					✓		✓	✓	✓	✓
40. Adonay Medium Clinic					✓		✓	✓	✓	✓
41. Holeta Medical Center					✓		✓	✓	✓	✓
42. Medhanialem HC	✓				✓	✓	✓	✓	✓	✓
43. Dibora Medium Clinic					✓	✓	✓	✓	✓	✓
44. Kookee Medium Clinic					✓	✓	✓	✓	✓	✓
45. Adaba Medium Clinic					✓	✓	✓	✓	✓	✓
46. Kidanmiheret Medium Clinic					✓		✓	✓	✓	✓
47. Eshetu Medium Clinic							✓	✓	✓	✓
48. Noah Medium Clinic								✓		✓
49. Kidues Medium Clinic						✓	✓		✓	✓
50. Addis Medium Clinic							✓			✓
51. Milliki Medium Clinic							✓			✓
52. Tesfa Medium Clinic										✓
53. Awash HC										✓
54. Hiberet HC									✓	✓

Name of facility	HCT	ART	OI/STI	PMTCT	TB	Maternal health	FP/RH	Child health	ANC	Lab
55. Tropical Medium Clinic										✓
56. Bilen HC										✓
57. Asela HC	✓							✓		✓
58. DMC_2 HC									✓	✓
59. Abdi Feyta Medium Clinic						✓	✓	✓	✓	✓
60. Yenazreth Medium Clinic										✓
61. Urael Medium Clinic										✓
62. Shoa Medium Clinic						✓			✓	✓
63. Amanuael General Hospital										✓
64. St. Rufael Medium Clinic										✓
65. Dukum Medium Clinic						✓	✓	✓	✓	✓
66. Gizaw HC			✓	✓	✓	✓		✓	✓	✓
67. Universal Medium Clinic	✓		✓		✓	✓	✓	✓	✓	✓
68. Assasuman Sofumer HC	✓		✓		✓	✓		✓	✓	✓
69. Koket Medium Clinic			✓		✓	✓	✓	✓	✓	✓
70. Hora Medium Clinic					✓	✓	✓		✓	✓
71. Edo Medium Clinic					✓					✓
72. Adea Medium Clinic					✓	✓	✓		✓	✓
73. Global HC						✓	✓	✓	✓	✓
74. Sama Senbet HC	✓		✓		✓		✓	✓	✓	✓
75. Afiya Medium Clinic					✓	✓		✓	✓	✓
76. Feyta HC	✓		✓		✓		✓	✓		✓
77. Dagim Medium Clinic			✓		✓	✓	✓		✓	✓
78. Dr. Hanim Poly Medium Clinic					✓		✓		✓	✓
79. Oliyad Medium Clinic						✓	✓	✓	✓	✓
80. Addisu Poly Medium Clinic			✓	✓	✓		✓		✓	✓
81. Amakelech Medium Clinic					✓	✓	✓			✓
82. Share Hospital			✓							✓
83. Kidane Miheret Medium Clinic					✓	✓	✓		✓	✓
84. Dr.Habtamu Medical Center			✓		✓	✓	✓	✓	✓	✓
85. Family Medium Clinic	✓		✓		✓	✓	✓	✓	✓	✓
86. Arsi Negele Poly Medium Clinic					✓	✓	✓	✓	✓	✓
87. Kohobol Medium Clinic			✓		✓	✓	✓	✓	✓	✓
88. Family Medium Clinic					✓					✓

✓ = Yes; Blank=No; **= Data not available

TABLE C-6. PATIENT LOAD OF THE HEALTH FACILITIES (OROMIA REGION, N=88)

Name of facility	OPD patients/wk	OPD patients/wk (in quartiles)
1. Gebie Medium Clinic	270	④
2. Amanual Medium Clinic	56	①
3. Beteseb Medium Clinic	105	②
4. Dr.Alemeneh Medium Clinic	50	①
5. Chora Medium Clinic	250	④
6. Dr.Gerbi Medium Clinic	233	④
7. Welliso Medium Clinic	172	③
8. Meta Abo Medium Clinic	14	①
9. Oda Medium Clinic	140	③
10. Dr.Feye Medium Clinic	210	④
11. Addis Hiwot Medium Clinic	194	③
12. Addis Hiwot HC	175	③
13. Darimu Poly HC	42	①
14. Goma Medium Clinic	75	②
15. Beley Medium Clinic	303	④
16. Gine HC	105	②
17. Dr Hile HC	140	③
18. Dr. Habetamu M.Clinic	343	④
19. Semele Medium Clinic	89	②
20. Boniat Medium Clinic	175	③
21. AWONI Medium Clinic	70	②
22. Dr.Geda Medium Clinic	105	②
23. Abdi Bole Medium Clinic	105	②
24. Abinezzer Medium Clinic	21	①
25. Jorgo Medium Clinic	15	①
26. Dr.Chali Fidadu Medium Clinic	21	①
27. Dr.Fantahun Medium Clinic	140	③
28. Medihen Medium Clinic	70	②
29. Mayo Medium Clinic	70	②
30. Gutu Medium Clinic	105	②
31. Nekemet Medical Center	420	④
32. Gelele Medium Clinic	42	①
33. National Medical Center	140	③
34. Dembele Medium Clinic	70	②
35. Shawa Medium Clinic	140	③
36. Gibe Poly Medium Clinic	49	①
37. Ambo Poly HC	730	④
38. Fasica Medium Clinic	70	②
39. Jibat Medium Clinic	175	③
40. Adonay Medium Clinic	420	④
41. Holeta Medical Center	490	④
42. Medhanialem HC	70	②
43. Dibora Medium Clinic	70	②
44. Kookee Medium Clinic	21	①
45. Adaba Medium Clinic	70	②
46. Kidanmiheret Medium Clinic	105	②
47. Eshetu Medium Clinic	54	①
48. Noah Medium Clinic	140	③
49. Kidues Medium Clinic	100	②
50. Addis Medium Clinic	50	①
51. Milliki Medium Clinic	35	①
52. Tesfa Medium Clinic	450	④
53. Awash HC	140	③
54. Hiberet HC	350	④
55. Tropical Medium Clinic	210	④
56. Bilen HC	**	**

Name of facility	OPD patients/wk	OPD patients/wk (in quartiles)
57. Asela HC	210	④
58. DMC_2 HC	140	③
59. Abdi Feya Medium Clinic	115	③
60. Yenazreth Medium Clinic	70	②
61. Urael Medium Clinic	42	①
62. Shoa Medium Clinic	90	②
63. Amanuael General Hospital	**	**
64. St. Rufael Medium Clinic	2	①
65. Dukum Medium Clinic	90	②
66. Gizaw HC	210	④
67. Universal Medium Clinic	175	③
68. Assasuman Sofumer HC	210	④
69. Koket Medium Clinic	70	②
70. Hora Medium Clinic	100	②
71. Edo Medium Clinic	140	③
72. Adea Medium Clinic	256	④
73. Global HC	90	②
74. Sama Senbet HC	350	④
75. Afiya Medium Clinic	70	②
76. Feya HC	160	③
77. Dagim Medium Clinic	120	③
78. Dr. Hanim Poly M/Clinic	70	②
79. Oliyad Medium Clinic	140	③
80. Addisu Poly Medium Clinic	70	②
81. Amakelech Medium Clinic	60	①
82. Share Hospital	500	④
83. Kidane Miheret M/Clinic	60	①
84. Dr.Habtamu Medical Center	112	③
85. Family Medium Clinic	70	②
86. Arsi Negele Poly Medium Clinic	105	②
87. Kohobol Medium Clinic	140	③
88. Family Medium Clinic	240	④

**= Data not available

①= First quartile (<100/wk)

②= Second quartile (100-120/wk)

③= Third quartile (121-224/wk)

④= Top quartile (>224/wk)

TABLE C-7. AVAILABILITY OF GUIDELINES AND PROTOCOLS (OROMIA REGION, N=88)

Name of facility	TB	TB/ HIV	HCT	ART	STI	Clinical manage- ment of HIV & OI	PIHCT	AFB & HIV test lab manuals
1. Gebie Medium Clinic								
2. Amanual Medium Clinic	✓	✓	✓	✓	✓	✓	✓	✓
3. Beteseb Medium Clinic	✓							
4. Dr.Alemeneh Medium Clinic		✓						
5. Chora Medium Clinic	✓							
6. Dr.Gerbi Medium Clinic	✓			✓	✓			✓
7. Welliso Medium Clinic	✓							
8. Meta Abo Medium Clinic								
9. Oda Medium Clinic								
10. Dr.Feye Medium Clinic	✓	**	**	✓				
11. Addis Hiwot Medium Clinic							✓	✓
12. Addis Hiwot HC	✓							
13. Darimu Poly HC	✓			✓		✓		
14. Goma Medium Clinic	✓							
15. Beley Medium Clinic								
16. Gine HC		✓						
17. Dr Hile HC								
18. Dr. Habetamu M.Clinic								
19. Semele Medium Clinic							**	**
20. Boniat Medium Clinic	**	**	**	**	**	**	**	**
21. AWONI Medium Clinic								
22. Dr.Geda Medium Clinic								
23. Abdi Bole Medium Clinic	✓	**	**	**	**	**	**	**
24. Abinezzer Medium Clinic								
25. Jorgo Medium Clinic	**	**	**	**	**	**	**	**
26. Dr.Chali Fidadu Medium Clinic	**	**	**	**	**	**	**	**
27. Dr.Fantahun Medium Clinic	**	**	**	**	**	**	**	**
28. Medihen Medium Clinic						✓		
29. Mayo Medium Clinic								
30. Gutu Medium Clinic								
31. Nekemet Medical Center	✓							
32. Gelele Medium Clinic								
33. National Medical Center	✓							
34. Dembele Medium Clinic	✓							
35. Shawa Medium Clinic								
36. Gibe Poly Medium Clinic								
37. Ambo Poly HC								
38. Fasca Medium Clinic								
39. Jibat Medium Clinic	✓					✓		
40. Adonay Medium Clinic								
41. Holeta Medical Center	✓			✓				
42. Medhanialem HC								
43. Dibora Medium Clinic								
44. Kookee Medium Clinic								
45. Adaba Medium Clinic								
46. Kidanmiheret Medium Clinic								
47. Eshetu Medium Clinic								
48. Noah Medium Clinic		✓		✓	✓			
49. Kidues Medium Clinic	**	**	**	**	**	**	**	**
50. Addis Medium Clinic	**	**	**	**	**	**	**	**
51. Milliki Medium Clinic	**	**	**	**	**	**	**	**
52. Tesfa Medium Clinic								
53. Awash HC	**	**	**	**	**	**	**	**

Name of facility	TB	TB/ HIV	HCT	ART	STI	Clinical manage- ment of HIV & OI	PIHCT	AFB & HIV test lab manuals
54. Hiberet HC								
55. Tropical Medium Clinic								
56. Bilen HC	**	**	**	**	**	**	**	**
57. Asela HC	**	**	**	**	**	**	**	**
58. DMC_2 HC								
59. Abdi Feya Medium Clinic		✓						
60. Yenazreth Medium Clinic	**	**	**	**	**	**	**	**
61. Urael Medium Clinic	**	**	**	**	**	**	**	**
62. Shoa Medium Clinic	**	**	**	**	**	**	**	**
63. Amanuael General Hospital	**	**	**	**	**	**	**	**
64. St. Rufael Medium Clinic				✓				
65. Dukum Medium Clinic	✓	✓	**	✓	✓			
66. Gizaw HC								
67. Universal Medium Clinic								
68. Assasuman Sofumer HC			✓					
69. Koket Medium Clinic					✓		✓	
70. Hora Medium Clinic								
71. Edo Medium Clinic								
72. Adea Medium Clinic				✓	✓	✓	✓	
73. Global HC	✓	✓	✓	✓	**	**	**	**
74. Sama Senbet HC	✓	✓	**	**	**	**	✓	✓
75. Afiya Medium Clinic	**	**	**	**	**	**	**	**
76. Feya HC		✓						
77. Dagim Medium Clinic				✓				
78. Dr. Hanim Poly M/Clinic				✓	✓			
79. Oliyad Medium Clinic	✓	✓		✓	✓			
80. Addisu Poly Medium Clinic								
81. Amakelech Medium Clinic								
82. Share Hospital								
83. Kidane Miheret M/Clinic								
84. Dr.Habtamu Medical Center	✓	✓	✓	✓	✓	✓		
85. Family Medium Clinic			✓		✓			
86. Arsi Negele Poly Medium Clinic								
87. Kohobol Medium Clinic								
88. Family Medium Clinic				✓				

✓= Yes; Blank=No; **= Data not available

TABLE C-8. RECORDING AND REPORTING BY THE HEALTH FACILITIES (OROMIA REGION, N=88)

Name of facility	Availability of data clerk	Regular recording and compilation	Regular reporting to one of these: RHB/ZHD/WoHO
1. Gebie Medium Clinic			
2. Amanual Medium Clinic		✓	
3. Beteseb Medium Clinic		✓	
4. Dr.Alemeneh Medium Clinic		✓	✓
5. Chora Medium Clinic			
6. Dr.Gerbi Medium Clinic		✓	
7. Welliso Medium Clinic		✓	
8. Meta Abo Medium Clinic			
9. Oda Medium Clinic			
10. Dr.Feye Medium Clinic		✓	✓
11. Addis Hiwot Medium Clinic		✓	✓
12. Addis Hiwot HC		✓	✓
13. Darimu Poly HC		✓	✓
14. Goma Medium Clinic		✓	✓
15. Beley Medium Clinic		✓	
16. Gine HC		✓	✓
17. Dr Hile HC		✓	✓
18. Dr. Habetamu M.Clinic		✓	✓
19. Semele Medium Clinic		✓	
20. Boniat Medium Clinic			
21. AWONI Medium Clinic			
22. Dr.Geda Medium Clinic			
23. Abdi Bole Medium Clinic	✓		
24. Abinezzer Medium Clinic			✓
25. Jorgo Medium Clinic			✓
26. Dr.Chali Fidadu Medium Clinic			
27. Dr.Fantahun Medium Clinic			✓
28. Medihen Medium Clinic			✓
29. Mayo Medium Clinic			✓
30. Gutu Medium Clinic			✓
31. Nekemet Medical Center			✓
32. Gelele Medium Clinic			✓
33. National Medical Center			✓
34. Dembele Medium Clinic			✓
35. Shawa Medium Clinic			
36. Gibe Poly Medium Clinic	✓	✓	✓
37. Ambo Poly HC	✓	✓	✓
38. Fasica Medium Clinic		✓	✓
39. Jibat Medium Clinic	✓	✓	✓
40. Adonay Medium Clinic			✓
41. Holeta Medical Center			
42. Medhanialem HC			
43. Dibora Medium Clinic			
44. Kookee Medium Clinic			
45. Adaba Medium Clinic			
46. Kidanmiheret Medium Clinic			
47. Eshetu Medium Clinic	✓	✓	✓
48. Noah Medium Clinic			
49. Kidues Medium Clinic			
50. Addis Medium Clinic		✓	✓
51. Milliki Medium Clinic			
52. Tesfa Medium Clinic		✓	✓
53. Awash HC			✓
54. Hiberet HC			

Name of facility	Availability of data clerk	Regular recording and compilation	Regular reporting to one of these: RHB/ZHD/WoHO
55. Tropical Medium Clinic		✓	✓
56. Bilen HC			
57. Asela HC			
58. DMC_2 HC			
59. Abdi Feya Medium Clinic		✓	✓
60. Yenazreth Medium Clinic			
61. Urael Medium Clinic		✓	✓
62. Shoa Medium Clinic			
63. Amanuael General Hospital			
64. St. Rufael Medium Clinic			
65. Dukum Medium Clinic			
66. Gizaw HC		✓	✓
67. Universal Medium Clinic		✓	✓
68. Assasuman Sofumer HC		✓	✓
69. Koket Medium Clinic		✓	✓
70. Hora Medium Clinic		✓	✓
71. Edo Medium Clinic		✓	✓
72. Adea Medium Clinic		✓	✓
73. Global HC	✓	✓	✓
74. Sama Senbet HC		✓	✓
75. Afiya Medium Clinic		✓	✓
76. Feya HC			✓
77. Dagim Medium Clinic			
78. Dr. Hanim Poly M/Clinic		✓	✓
79. Oliyad Medium Clinic		✓	✓
80. Addisu Poly Medium Clinic		✓	✓
81. Amakelech Medium Clinic			
82. Share Hospital	✓	✓	
83. Kidane Miheret M/Clinic		✓	✓
84. Dr.Habtamu Medical Center			
85. Family Medium Clinic		✓	✓
86. Arsi Negele Poly Medium Clinic		✓	✓
87. Kohobol Medium Clinic		✓	✓
88. Family Medium Clinic	**		✓

✓= Yes; Blank=No; **= Data not available

TABLE C-9. WILLINGNESS OF THE HEALTH FACILITIES FOR FUTURE INVOLVEMENT IN TB/HIV SERVICE PROVISION (OROMIA REGION, N=88)

Name of facility	Willingness to avail ≥ 3 health workers for training	Availability of trained staff that can be assigned to work on DOTS	Ability to handle logistics on PPM-DOTS
1. Gebie Medium Clinic	✓		✓
2. Amanual Medium Clinic	✓		✓
3. Beteseb Medium Clinic			✓
4. Dr.Alemeneh Medium Clinic	✓		✓
5. Chora Medium Clinic	✓		✓
6. Dr.Gerbi Medium Clinic	✓		✓
7. Welliso Medium Clinic	✓		✓
8. Meta Abo Medium Clinic	✓		
9. Oda Medium Clinic	✓		✓
10. Dr.Feye Medium Clinic	✓		
11. Addis Hiwot Medium Clinic	✓		✓
12. Addis Hiwot HC	✓		✓
13. Darimu Poly HC	✓		✓
14. Goma Medium Clinic	✓		✓
15. Beley Medium Clinic	✓		✓
16. Gine HC	✓	**	✓
17. Dr Hile HC	✓		✓
18. Dr. Habetamu M.Clinic	✓		✓
19. Semele Medium Clinic	✓		✓
20. Boniat Medium Clinic	✓		✓
21. AWONI Medium Clinic	✓		✓
22. Dr.Geda Medium Clinic	✓		✓
23. Abdi Bole Medium Clinic	✓		✓
24. Abinezzer Medium Clinic	✓	**	✓
25. Jorgo Medium Clinic	✓		**
26. Dr.Chali Fidadu Medium Clinic	✓		✓
27. Dr.Fantahun Medium Clinic	✓		✓
28. Medihen Medium Clinic	✓		✓
29. Mayo Medium Clinic	✓		✓
30. Gutu Medium Clinic	✓		✓
31. Nekemet Medical Center	✓		✓
32. Gelele Medium Clinic	✓		✓
33. National Medical Center	✓	**	
34. Dembele Medium Clinic		**	✓
35. Shawa Medium Clinic	✓	**	✓
36. Gibe Poly Medium Clinic	✓		✓
37. Ambo Poly HC	✓		✓
38. Fasica Medium Clinic			**
39. Jibat Medium Clinic	✓		✓
40. Adonay Medium Clinic	✓	**	✓
41. Holeta Medical Center	✓		✓
42. Medhanialem HC	✓	**	✓
43. Dibora Medium Clinic	✓		✓
44. Kookee Medium Clinic	✓	**	**
45. Adaba Medium Clinic	✓		✓
46. Kidanmiheret Medium Clinic			
47. Eshetu Medium Clinic	✓		✓
48. Noah Medium Clinic	✓		✓
49. Kidues Medium Clinic	**	**	**
50. Addis Medium Clinic	✓		✓
51. Milliki Medium Clinic	✓		✓
52. Tesfa Medium Clinic	✓		

Name of facility	Willingness to avail ≥ 3 health workers for training	Availability of trained staff that can be assigned to work on DOTS	Ability to handle logistics on PPM-DOTS
53. Awash HC	✓		
54. Hiberet HC	✓		✓
55. Tropical Medium Clinic	✓		
56. Bilen HC	**	**	**
57. Asela HC	✓		✓
58. DMC_2 HC	✓		✓
59. Abdi Feyta Medium Clinic	✓		
60. Yenazreth Medium Clinic	✓		✓
61. Urael Medium Clinic	**	**	**
62. Shoa Medium Clinic	✓		
63. Amanuael General Hospital	**	**	**
64. St. Rufael Medium Clinic		**	**
65. Dukum Medium Clinic	✓	✓	✓
66. Gizaw HC	✓		✓
67. Universal Medium Clinic	✓		✓
68. Assasuman Sofumer HC	✓	✓	
69. Koket Medium Clinic	✓	✓	✓
70. Hora Medium Clinic	✓	✓	✓
71. Edo Medium Clinic	✓		✓
72. Adea Medium Clinic	✓		✓
73. Global HC	✓	✓	✓
74. Sama Senbet HC	✓	✓	✓
75. Afiya Medium Clinic			
76. Feyta HC	✓	✓	✓
77. Dagim Medium Clinic	✓	✓	✓
78. Dr. Hanim Poly M/Clinic	✓		
79. Oliyad Medium Clinic	✓		
80. Addisu Poly Medium Clinic	✓		
81. Amakelech Medium Clinic	✓		
82. Share Hospital	✓	✓	✓
83. Kidane Miheret M/Clinic	✓		
84. Dr.Habtamu Medical Center	✓		
85. Family Medium Clinic	✓		
86. Arsi Negele Poly Medium Clinic	✓	✓	✓
87. Kohobol Medium Clinic	✓		✓
88. Family Medium Clinic			

✓= Yes; Blank=No; **= Data not available

ANNEX D. REFERENCES

- CSA (Central Statistical Authority). The 1994 [EC] Population and Housing Census of Ethiopia. Results at country level. Vol.I. Statistical Report. 1998 (EC). Addis Ababa, Ethiopia.
- FMOH (Federal Ministry of Health of Ethiopia). 2006. HIV/AIDS in Ethiopia. 6th Report. Addis Ababa, Ethiopia: FMOH Epidemiology and Disease Prevention Department.
- FMOH (Ethiopia). 2007. Health and health related indicators 1999 (EC) (2006/07 GC). Addis Ababa, Ethiopia: FMOH Planning and programming department.
- Ministry of Health and Welfare and Korean National Tuberculosis Association. 1996. Report on the 7th tuberculosis prevalence survey in Korea, 1995. Seoul, Korea.
- National Council of Applied Economic Research, India. 1995. Household Survey of Health Care Utilization and Expenditure. Working Paper No. 53. New Delhi, India.
- Newell J., Pande S.B., Baral S.C., Bam D.S., & Malla P. 2004. Control of tuberculosis in an urban setting in Nepal: public–private partnership. *Bulletin of the World Health Organization* 82: 92-98.
- Sarmiento A.G. 1990. Operational Assessment of the case finding and treatment aspects of the Strengthened National Tuberculosis Control Programme. Manila, The Philippines: Department of Health.
- Uplekar M, Pathania V, Raviglione M. 2001. Private practitioners and public health: weak links in tuberculosis control. *Lancet* 385: 912-6.
- Uplekar M, Rangan S. 1996. *Tackling TB: The Search for Solutions*. Mumbai, India: The Foundation for Research in Community Health.
- WHO (World Health Organization). 2000. Global tuberculosis control: WHO report 2000. WHO document WHO/CDS/TB/2000.275. Geneva.
- WHO. 2003. Public-Private Mix for DOTS. Practical tools to help implementation. TB Strategy and Operations Stop TB Department, DOTS expansion working group. WHO/CDS/TB/2003.325. Geneva.
- World Bank. 1993. *Investing in Health: World Development Report, 1993*. Washington DC.