



The Ethiopian Public Health Institute



Ethiopia Service Provision Assessment Plus Survey 2014

Key Findings

Ethiopian Public Health Institute (EPHI)

Federal Ministry of Health

ICF International

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Addis Ababa, Ethiopia

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ICF International
Rockville, Maryland USA

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This report presents preliminary findings of the 2014 Ethiopia Service Provision Assessment Plus Survey (2014 ESPA+), which was implemented by the Ethiopian Public Health Institute in collaboration with the Ethiopian Ministry of Health. ICF International provided technical assistance. The 2014 ESPA+ is part of the worldwide MEASURE DHS project which assists countries in the data collection process to monitor and evaluate population, health, and nutrition programmes. The survey was funded by the United States Agency for International Development (USAID), World Bank, Irish Aid, WHO and UNICEF.

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ACRONYMS AND ABBREVIATIONS

ACT	Artemisinin Combination Therapy
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ART	Antiretroviral Therapy
ARV	Antiretroviral
BCG	Bacillus Calmette-Guerin
CAFE	Computer Assisted Field Editing
CAPI	Computer Assisted Personal Interviewing
ELISA	Enzyme-Linked Immuno-Sorbent Assay
EPHI	Ethiopian Public Health Institute
ESPA+	Ethiopia service provision assessment plus
HEW	Health Extension Worker
HIV	Human Immunodeficiency Virus
IMCI	Integrated Management of Childhood Illnesses
ITN	Insecticide-Treated Net
MCH	Maternal and Child Health
MOH	Ministry of Health
NGO	Nongovernmental Organisation
NTD	Neglected Tropical Diseases
PHCU	Primary Health Care Unit
PMTCT	Prevention of Mother-To-Child Transmission (of HIV)
RDT	Rapid Diagnostic Test
SARA	Service Availability and Readiness Assessment
SDI	Service Delivery Indicator
STI	Sexually Transmitted Infection
TT	Tetanus Toxoid
USAID	United States Agency for International Development
WHO	World Health Organization

1. INTRODUCTION

1.1 Background

The 2014 Ethiopia Service Provision Assessment Plus (2014 ESPA+) survey is undertaken by the Ethiopian Public Health Institute (EPHI) with technical support from ICF International under the MEASURE DHS Project, and World Bank. The United States Agency for International Development (USAID), World Bank, UNICEF, Irish Aid and WHO have also provided the financial support. The technical committee, that was established for this particular survey has oversee all policy and technical issues related to the survey.

The purpose of the 2014 ESPA+ survey is to collect information on the delivery of health care services in Ethiopia and examine the preparedness of facilities for the provision of quality health services in the areas of child health, maternal and newborn care, family planning, sexually transmitted infections, HIV and AIDS, and tuberculosis.

This preliminary report presents provisional results on facility infrastructure and service delivery based on information collected from the health facilities. This information believed to help health programme managers and policy makers to prioritise interventions that will enhance the provision of quality health services. A comprehensive report on the survey findings will be published later.

1.2 Survey Objectives

The objectives of the 2014 ESPA+ were to:

- Assess the preparedness of health facilities in Ethiopia to provide quality child and maternal health and family planning services.
- Provide comprehensive information on the performance of different types of facilities that provide essential health care services.
- Identify gaps in the support services, resources, and processes that are used to provide health services and that may negatively affect the ability of facilities to provide quality services.
- Describe the processes used to provide essential health care services and the extent to which accepted standards for quality service provision are adhered to.
- Compare the findings by facility type, management authority, and region.
- Describe the extent to which clients understand the advice given on the service received so that the best health outcome is achieved.
- Institutionalize capacity to carry out nationwide surveys and use data for further analyses and future survey planning, with diminishing external support, as a long-term objective

2. SURVEY IMPLEMENTATION

2.1 Sample Design and Implementation

The 2014 ESPA+ was designed to be a cross-sectional study, which combine MEASURE DHS SPA, WHO's Service Availability and Readiness Assessment (SARA) and the World Bank's Service Delivery Indicator (SDI). The sample size for the ESPA+ was determined by a combination of census and random samples. The public health care sector in Ethiopia is organized into a three-tier system: level one (district health system) is comprised of a primary hospital, and health centres with their satellite health posts. Health posts are manned by Health Extension Workers (HEWs), and provide mainly essential promotive and preventive services and limited curative services. Level one (primary hospital, health centre and their satellite health posts) constitute the Primary Health Care Unit (PHCU). Level two is composed of general hospitals, while level three is made up of specialized hospitals. The private-for-profit and NGO health sectors in Ethiopia have seen rapid expansion in recent years, which is augmenting the public – private – NGO partnership for health.

A list of 23,102 of formal sector health facilities in Ethiopia were obtained from the Ethiopian Ministry of Health. The list included 202 hospitals, 3,292 health centres, 15, 618 health posts, and 3,990 private clinics (higher clinics, Medium clinics and lower clinics). These facilities were managed by the following authorities: the government, the other governmental (military, prison, federal police), private for profit and NGOs (mission/faith based, non profit).

Because of their importance and limited numbers, all hospitals, were included in the survey and allowing for inclusion of newly identified hospital. A representative sample of health centres and clinics were selected for the survey. A total sample size of 1,327 health facilities were selected, including 321 health posts and 10 newly identified hospitals. Health posts were selected independently. The sample included all hospitals and a sample of health centres and private facilities.

In order to respond to the data needs of the FMOH, key information on facility infrastructure, services offered, and GPS records were collected from all public hospitals and sampled health centres; on the other hand, all the remaining health centres were visited by a separate set of teams concurrently, using a simplified version/a subset of the inventory questionnaire. This component of the assessment is referred to as the Census.

Table 2.1 presents the percent distribution of the facilities on the master list and the results obtained based on the attempts made to visit those facilities. Some facilities on the list had closed down or not yet operational (11 percent); in 1 percent of the facilities interviews were not conducted for various reasons including: security reason in Somalia region, inaccessible for various reasons in Gambella region, duplicate facility name, inability to obtain consent at military hospitals, and due to facility type change to a special dental clinic. As a result, data were successfully collected from a total of 1,165 facilities, representing 88 percent of those on the sampled list.

Table 2.1 Result of facility contact, by background characteristics

Percent distribution of sampled facilities according to result of visit of the survey team to the facility, by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Completed	Respondent not available	Refused	Closed/not yet operational	Other	Total percent	Number of facilities surveyed
Facility type							
Referral Hospital	97	0	0	3	0	100	33
General Hospital	97	0	1	1	1	100	134
Primary Hospital	93	0	0	7	0	100	56
Health Center	98	0	0	2	0	100	298
Health Post	91	1	0	7	1	100	321
Higher Clinic	81	0	1	17	0	100	70
Medium Clinic	79	0	0	20	2	100	168
Lower Clinic	72	0	0	28	0	100	247
Managing authority							
Government/public	95	1	0	4	1	100	768
Other governmental (military, prison, federal police)	83	0	0	0	17	100	12
Private for profit	77	0	0	22	1	100	515
NGO (mission/faith-based, nonprofit)	97	0	0	3	0	100	32
Region							
Tigray	88	1	1	9	2	100	132
Afar	82	4	0	14	0	100	78
Amhara	89	0	0	11	0	100	184
Oromia	88	1	0	11	0	100	236
Somali	80	0	0	15	5	100	84
Benishangul Gumuz	84	0	0	16	0	100	77
SNNP	91	0	0	9	0	100	183
Gambella	84	0	0	15	1	100	80
Harari	92	0	0	5	3	100	61
Addis Ababa	87	0	1	13	0	100	128
Dire Dawa	96	0	0	4	0	100	84
Urban/rural							
Urban	88	0	0	11	0	100	624
Rural	90	1	0	9	0	100	684
Unknown	0	5	0	68	26	100	19
Total	88	0	0	11	1	100	1,327

Note: some of the rows may not add up to 100 percent due to rounding

Table 2.2 presents the percent distribution by background characteristics of the facilities that were successfully assessed. Majority of the facilities in the country (using adjusted/weighted proportions to reflect actual facility distribution in Ethiopia) are health posts (69 percent) and health centres (16 percent). Private clinics (14 percent) and Hospitals (1 percent) are the fewest in number. Majority (85 percent) of the facilities are managed by the government. Facilities managed by private for profit (14 percent) and NGO (mission/faith-based, nonprofit) (1 percent) are small in proportion.

Oromia region contain the largest proportion of the facilities (37 percent) followed by SNNP and Amhara regions which contain about one-fourth of the facilities each (24 percent and 23 percent respectively).

The majority (85 percent) of health facilities are located in rural area of the country.

Table 2.2 Distribution of surveyed facilities, by background characteristics

Percent distribution and number of surveyed facilities, by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Weighted percent distribution of surveyed facilities	Number of facilities surveyed	
		Weighted	Unweighted
Facility type			
Referral Hospital	0	2	32
General Hospital	1	7	130
Primary Hospital	0	3	52
Health Center	16	182	292
Health Post	69	802	292
Higher Clinic	1	13	57
Medium Clinic	3	37	132
Lower Clinic	10	119	178
Managing authority			
Government/public	85	990	728
Other governmental (military, prison, federal police)	0	4	10
Private for profit	14	163	396
NGO (mission/faith-based, nonprofit)	1	8	31
Region			
Tigray	5	54	116
Afar	1	14	64
Amhara	23	269	163
Oromia	37	432	208
Somali	3	39	67
Benishangul Gumuz	2	21	65
SNNP	24	285	167
Gambella	1	10	67
Harari	0	3	56
Addis Ababa	3	31	111
Dire Dawa	0	5	81
Urban/rural			
Urban	15	176	551
Rural	85	989	614
Total	100	1,165	1,165

2.2 Data Collection Instruments

To achieve the objectives of the assessment and capture information from the different categories, data were collected using the following instruments:

- A **facility inventory questionnaire** was used to obtain information on how the facilities are prepared to provide each of the priority services. The facility inventory questionnaire collects information on the availability of specific items (including their location and functional status), components of support systems (e.g., logistics, maintenance, and management), and facility infrastructure, including the service delivery environment. Hence, the most knowledgeable person about the organisation of the facility and/or the most knowledgeable provider of each service was interviewed by the data collectors. If another provider needed to give some specific information, that provider was invited (or visited, if

appropriate) and questioned about that information. The inventory questionnaire is organised into the following three modules:

(1) Module 1 elicits information on service availability.

(2) Module 2 collects information on general facility readiness. Seven sections cover topics such as facility infrastructure (sources of water, electricity, etc.), staffing, health management information systems, health statistics, processing of instruments for re-use, health care waste management, availability of basic supplies and equipment, laboratory diagnostic capacity, and medicines and commodities.

(3) Module 3 solicits information on service-specific readiness. Sections cover child health (child vaccination, growth monitoring, and curative care), family planning, antenatal care, prevention of mother-to-child transmission of HIV (PMTCT), delivery and newborn care, non-communicable disease and infectious diseases such as tuberculosis, malaria, and HIV/AIDS.

- A **health provider questionnaire** was used to solicit information from a sample of health service providers on their qualifications (training, experience, and continuing education), supervision they had received, and their perceptions of the service delivery environment. The Health worker interview questionnaire was modified to include a set of service specific “knowledge” questions based on World Bank’s SDI clinical knowledge assessment modules, to assess individual health providers’ knowledge in managing common health conditions. Table 2.3 shows the number and percent distribution of health providers who were interviewed with the health provider questionnaire. A total of 6,125 providers were interviewed, mainly from government managed health facilities (87 percent) most often in health centres (44 percent) and in health posts (33 percent) made frequently of diploma nurses (34 percent) and health extension workers (30 percent).
- **Observation protocols** captured key components of consultations and examinations of sick children, antenatal care, and family planning. Once in a facility, interviewers attempted to observe a sample of consultations for their respective service component (antenatal care, family planning, or sick child) as they occurred. Table 2.4 presents the number and percent distribution of observations of consultations (actual and weighted). Most of the observations, in order of frequency, were sick children (1,908), antenatal care clients (1,853), and family planning clients (1,247).
- **Client exit interview questionnaires** were designed to assess each client’s understanding of the consultation and/or examination as part of their visit to the facility. Client exit interviews were conducted with clients whose consultations had been observed. Table 2.5 presents the number of clients attending facility on the day of the survey eligible for observation, number whose consultations were observed and who were interviewed, and the percentages of eligible clients who were observed and interviewed by type of service and type of facility. Most of

eligible clients present on the day of the survey, in order of frequency, were sick children (1,980), antenatal care clients (1,902), and family planning clients (1,265). Almost all clients present on the day of the survey were observed and interviewed ranging from 96 to 99 percent.

Table 2.3 Distribution of interviewed providers, by background characteristics and provider qualification

Percent distribution and number of interviewed providers, by background characteristics and provider qualification, Ethiopia SPA+ 2014

Background characteristics	Weighted percent distribution of interviewed providers	Number of interviewed providers	
		Weighted	Unweighted
Facility type			
Referral Hospital	3	176	435
General Hospital	8	464	1,555
Primary Hospital	2	145	581
Health Center	44	2,676	2,145
Health Post	33	2,013	459
Higher Clinic	2	123	266
Medium Clinic	4	237	413
Lower Clinic	5	291	271
Total	100	6,125	6,125
Managing authority			
Government/public	87	5,306	4,474
Other governmental (military, prison, federal police)	0	24	54
Private for profit	12	705	1,402
NGO (mission/faith-based, nonprofit)	1	89	195
Total	100	6,125	6,125
Region			
Tigray	7	436	647
Afar	1	81	257
Amhara	20	1,242	854
Oromia	33	2,018	1,267
Somali	3	194	352
Benishangul Gumuz	2	121	297
SNNP	22	1,363	831
Gambella	1	49	188
Harari	0	27	196
Addis Ababa	9	547	873
Dire Dawa	1	48	363
Urban/rural			
Urban	34	2,054	3,922
Rural	66	4,071	2,203
Total	100	6,125	6,125
Provider type			
General practitioner	2	134	419
MD specialist: general surgeon	0	7	22
MD specialist: obstetrician and gynecologist	0	14	64
MD specialist: internist	0	15	55
MD specialist: pediatrician	0	11	49
Other MD specialist, including service specialist	0	7	17
Health officer	7	407	501

Nurse (diploma)	34	2,083	2,379
Nurse (BSc)	5	289	483
Public health nurse	2	111	74
Midwives (BSc)	1	44	112
Midwives (diploma)	8	516	635
Specialized nurse including neonatology, etc.	0	4	16
Integrated Emergency Surgical Officer (IESO)	0	6	28
MSC in medical laboratory	0	0	1
Lab technologist	2	141	262
Laboratory technician	7	437	592
Health extension worker	30	1,854	347
Other	1	43	69
Total	100	6,125	6,125

Table 2.4 Distribution of observed consultations

Percent distribution and number of observed consultations for, outpatient curative care for sick children, family planning, and antenatal care, by type of facility, Ethiopia SPA+ 2014

Facility type	Percent distribution of observed consultations	Number of observed consultations	
		Weighted	Unweighted
OUTPATIENT CURATIVE CARE FOR SICK CHILDREN			
Referral Hospital	20	382	109
General Hospital	18	334	537
Primary Hospital	5	86	230
Health Center	43	825	720
Health Post	7	142	65
Higher Clinic	1	22	54
Medium Clinic	3	59	134
Lower Clinic	3	57	59
Urban/rural			
Urban	65	1,241	1,382
Rural	35	667	526
Total	100	1,908	1,908
FAMILY PLANNING			
Referral Hospital	3	40	86
General Hospital	13	160	252
Primary Hospital	4	52	139
Health Center	71	880	628
Health Post	6	73	44
Higher Clinic	0	1	16
Medium Clinic	2	21	57
Lower Clinic	2	21	25
Urban/rural			
Urban	51	635	835
Rural	49	612	412
Total	100	1,247	1,247
ANTENATAL CARE			
Referral Hospital	12	218	179
General Hospital	21	389	618
Primary Hospital	5	96	225
Health Center	57	1,050	736
Health Post	4	71	25

Higher Clinic	0	3	29
Medium Clinic	1	25	36
Lower Clinic	0	2	5
Urban/rural			
Urban	60	1,116	1,367
Rural	40	737	486
Total	100	1,853	1,853

Table 2.5 Distribution of observed and interviewed clients (unweighted)

Number of clients attending facility on the day of the survey eligible for observation, number whose consultations were observed and who were interviewed, and the percentages of eligible clients who were observed and interviewed, by type of service and type of facility, Ethiopia SPA+ 2014

Facility type	Total number of clients present on the day of the survey	Actual number of clients observed and interviewed	Percentage of clients who were observed and interviewed
OUTPATIENT CURATIVE CARE FOR SICK CHILDREN			
Referral Hospital	115	109	95
General Hospital	568	537	95
Primary Hospital	235	230	98
Health Center	743	720	97
Health Post	66	65	98
Higher Clinic	55	54	98
Medium Clinic	139	134	96
Lower Clinic	59	59	100
Urban/rural			
Urban	1,444	1,382	96
Rural	536	526	98
Total	1,980	1,908	96
FAMILY PLANNING			
Referral Hospital	88	86	98
General Hospital	256	252	98
Primary Hospital	141	139	99
Health Center	638	628	98
Health Post	44	44	100
Higher Clinic	16	16	100
Medium Clinic	57	57	100
Lower Clinic	25	25	100
Urban/rural			
Urban	851	835	98
Rural	414	412	100
Total	1,265	1,247	99
ANTENATAL CARE			
Referral Hospital	186	179	96
General Hospital	636	618	97
Primary Hospital	230	225	98
Health Center	752	736	98
Health Post	25	25	100
Higher Clinic	30	29	97
Medium Clinic	38	36	95
Lower Clinic	5	5	100
Urban/rural			
Urban	1,407	1,367	97
Rural	495	486	98

2.3 Data Collection Approaches

Following the preparation of the final questionnaires in English, the questionnaires were translated into three major languages that are, Amharigna, Oromiffa, and Tigrigna. English and Amharigna translation of the inventory questionnaire were loaded onto tablet computers, which were used during interviews to ask questions and also record responses (Computer Assisted Personal Interviewing–CAPI). All other types of questionnaires were paper based, but responses were entered into computers and edited in the field (Computer Assisted Field Editing–CAFE).

2.4 Training and Data Collection

Pre-Test

The pre-test for the 2014 ESPA+ took place from October 15, 2013–November 13, 2013. Sixteen regional coordinators and fourteen interviewers all mostly health providers hired by EPHI were trained as interviewers in the application of the questionnaires and computer programmes and also trained as trainers of the main training. During pre-test data collection, health facilities within Oromia region were surveyed for three days to test and refine the survey instruments and the computer programmes. After the pre-test, the questionnaires and computer programmes were finalised for the main data assessment. ICF personnel lead the training and staff from EPHI, FMOH and World Bank were also involved in the training on their area of expertise.

Main Assessment

The main training for the 2014 ESPA+ took place from February 06 to March 09, 2014. Eight of the sixteen regional coordinators, who have masters' degree level education in health with prior survey experience, have done the main assessment in Amharic. Fourteen interviewers, who were also involved in the pre-test, remained with EPHI to assist in preparation for and during main training as well. EPHI personnel along with ICF international and World Bank personnel oversaw the training.

One hundred Eighty-nine data collectors, mostly health providers (nurses, nurse midwives, and clinicians) were trained in the application of survey instruments and computer programmes. The training included classroom lectures and discussion, practical demonstrations, mock interviews, role plays, and field practices. The participants were also given daily homework—to conduct mock interviews among themselves using the survey tools. The first two weeks of training were dedicated exclusively to training interviewers on use of paper based questionnaires, and also to field practice. The three days of field practice was to ensure that the participants understood the content of the (paper based) questionnaires, as well as how to organise themselves once in a health facility.

During the third week of training, participants were first introduced to tablet computers, and then transitioned to the use of the tablet computers for data collection (CAPI) and for data entry and editing (CAFE); this was done using completed paper questionnaires from the facilities visited during the pre-test.

During the fourth week, participants practiced all questionnaire types and CAPI/CAFE approaches in teams and in pairs. The first three days of the fifth week were dedicated to field practice using computers followed by a two days discussion on concerns raised from the field practice.

Following the training, 36 teams were formed, each consisting of a team leader, four interviewers, and a driver. Extra interviewers were dispersed throughout teams.

Data collection took place from March 10, 2014, to July 25, 2014.

Fieldwork supervision was coordinated by EPHI. TWG members, FMOH staff, EPHI staff, World Bank and ICF personnel participated in supportive fieldwork supervision. Eight regional coordinators were each assigned four to five teams to supervise. They made periodic visits to their teams to review work and monitor data quality. Four of the regional coordinators assumed the role of a data managers and coordinators in the survey central office. Six data editors were hired to support the survey central office.

2.5 Data Analysis

Several conventions were observed during the analysis of the 2014 ESPA+ data.

- First, unless otherwise indicated, the 2014 ESPA+ considered only those items observed by the interviewers themselves to be available.
- Second, in a majority of facilities, multiple health workers contribute to the services received by clients. The health worker, who ultimately assesses the client, makes the final diagnosis and prescribes any treatment, if necessary, and is identified as the primary provider for the particular service. This health worker is the provider who the survey observes using the observation protocols.
- Third, quite often, certain measurements (e.g., measuring blood pressure and temperature) are routinely done by health workers other than the primary provider, and separate from the actual consultation. Where this system is used, and all clients receive these measurements as part of their visit, then clients who are selected for observation are assumed to have received these measurements, even if the primary provider does not take these measurements.

3. RESULTS

3.1 Availability of all Services

Tables 3.1 and 3.2 present information on the overall availability of individual services. The comprehensive inventory of the available individual services contributes to use of service.

Table 3.1 Availability of all services

Among all facilities excluding health posts, the percentages and numbers that offer specific services, Ethiopia SPA+ 2014

Service provided	Percentage of facilities offering service (weighted)	Number of facilities offering service	
		Weighted	Unweighted
Child vaccination services (EPI), either at the facility or as outreach ¹	49	177	449
Growth monitoring services, either at the facility or as outreach ¹⁰	51	185	448
Curative care services for children under age 5, either at the facility or as outreach	93	337	795
Any family planning services, including modern methods, fertility awareness methods, male or female surgical sterilization ²	89	324	742
Antenatal care services	77	281	660
Service for the prevention of mother-to-child transmission of HIV (PMTCT) ³	48	175	468
Normal delivery ¹¹	65	237	571
Diagnosis or treatment of malaria ⁹	93	338	828
Diagnosis or treatment of STIs, excluding HIV ¹²	93	338	823
Diagnosis, treatment prescription or follow-up for TB ⁸	69	252	659
HIV testing and counseling (HTC) services ⁵	59	216	590
HIV/AIDS antiretroviral prescription or treatment follow-up services ⁶	17	61	285
HIV/AIDS care and support services ⁷	27	96	347
Diagnosis or management of non-communicable diseases ¹³	81	293	747
Minor surgical services ¹⁴	73	264	666
Caesarean delivery (Caesarean section) ⁴	3	12	182
Laboratory diagnostic services ¹⁵	57	208	645
Blood transfusion services ¹⁶	3	12	194
Neglected tropical diseases	68	247	632
Pediatric inpatient services	21	75	309
Emergency services	97	354	833
Inpatient services ¹⁷	33	119	428
Intensive care unit (ICU) services	1	3	62
Surgical and orthopedic care services	2	8	136
Neonatology unit	3	10	90
Total	-	363	873

¹ Routine series of Pentavalent, polio, and measles vaccinations offered from the facility, excluding any outreach services

² Facility provides, prescribes, or counsels clients on any of the following: contraceptive pills (combined or progestin-only), injectable (progestin-only), implants, IUCDs, male condoms, female condoms, female sterilization (tubal ligation), male sterilization (vasectomy), or periodic abstinence method.

³ Facility reports that it provides any of the following services for the prevention of mother-to-

child transmission (PMTCT) of HIV: HIV testing and counseling for pregnant women or children born to HIV-positive women, provision of antiretroviral (ARV) prophylaxis to HIV-positive pregnant women or to newborns of HIV-positive women, provision of infant and young child feeding for PMTCT, provision of nutritional counseling for HIV-positive pregnant women and their infants, provision of family planning counseling to HIV-positive pregnant women, or provision of ART to HIV-positive pregnant women.

⁴ Facility reports that it provides Caesarean delivery services in facility.

⁵ Facility reports that it has the capacity to conduct HIV testing in the facility, either by rapid diagnostic testing or ELISA, and an unexpired HIV rapid diagnostic test kit is available in the facility on the day of the survey, or other test capability is available.

⁶ Facility reports that providers in the facility prescribe antiretroviral (ARV) treatment and/or provide clinical follow-up for clients on ARV treatment. Outreach ART facilities are included in this definition.

⁷ Facility reports that providers in the facility prescribe or provide any of the following: · Treatment for any opportunistic infections or for symptoms related to HIV/AIDS, including treatment for topical fungal infections;

- Systematic intravenous treatment for specific fungal infections such as cryptococcal meningitis;
- Treatment for Kaposi's sarcoma;
- Palliative care, such as symptom or pain management, or nursing care for terminally ill or severely debilitated patients;
- Nutritional rehabilitation services, including client education, provision of nutritional or micronutrient supplementation;
- Fortified protein supplementation;
- Care for pediatric HIV/AIDS patients;
- Preventive treatment for TB, i.e., isoniazid with pyridoxine;
- Primary preventive treatment for opportunistic infections, such as cotrimoxazole preventive treatment;
- General family planning counseling and/or services for HIV-positive clients;
- Condoms

⁸ Facility reports that providers assigned to the facility diagnose TB, prescribe treatment for TB, or provide TB treatment follow-up services for clients put on treatment elsewhere.

⁹ Facility reports that it offers malaria diagnosis and/or treatment services. Also, facilities offering curative care for sick children where providers of sick child services were found on the day of the survey to be making diagnosis of malaria or offering treatment for malaria were counted as offering malaria diagnosis and/or treatment services.

¹⁰ Child Growth Monitoring services: Growth monitoring is the regular monitoring of a "well" child, to see how s/he is developing. It usually involves measurement of a child's weight and height from birth through age 5 years. The rate of growth is checked against a chart to assure they were within an acceptable range. These services are usually offered from "well baby" clinics. We are interested in whether the facility offers these services, either in the facility or as outreach.

¹¹ Normal delivery refers to a birth that is vaginal, spontaneous in onset, low-risk at the start of labor, and remaining so through labor and delivery. Delivery services are almost always with newborn care services, which refer to treatment received by a newborn child from the date of birth and for the first four weeks of life.

¹² These include any service to diagnose or treat sexually transmitted infections, excluding HIV infection.

¹³ Diagnosis and management of non-communicable diseases including diabetes, cardiovascular diseases, and chronic respiratory conditions in adults.

¹⁴ These are defined as any situation that requires suture, incision, excision, manipulation, or procedures that can be performed in the general OPD and not requiring the use of a surgical theatre. Examples include incision and drainage of an abscess, suturing of cuts, etc.

¹⁵ These include the collection of specimen, and diagnostic tests, including rapid diagnostic tests. Note that for the purposes of this assessment, a laboratory does not necessarily require the availability of a specific or designated laboratory building, but the mere presence of the ability to conduct tests in the facility. It may be a room in a facility, with equipment set up to conduct various tests.

¹⁶ Blood transfusion is the process of delivering whole blood or blood products (such as red blood cells, white blood cells, plasma) into an individual's circulatory system intravenously, to replace lost components of the blood.

¹⁷ IS is a service provided to a patient who is admitted to a hospital or a clinic for treatment that requires at least one overnight stay in the course of treatment, examination, or observation.

Table 3.2 Availability of all services at health posts

Among all health posts, the percentages and numbers that offer specific services, Ethiopia SPA+ 2014

Service provided	Percentage of facilities offering service (weighted)	Number of facilities offering service	
		Weighted	Unweighted
Child vaccination services (EPI), either at the facility or as outreach ¹	82	658	235
Growth monitoring services, either at the facility or as outreach ¹⁰	83	668	221
Curative care services for children under age 5, either at the facility or as outreach	96	766	280
Any family planning services, including modern methods, fertility awareness methods, male or female surgical sterilization ²	94	757	265
Antenatal care services	92	736	259
Normal delivery ¹¹	45	358	146
Diagnosis or treatment of malaria ⁹	76	612	260
Diagnosis or treatment of STIs, excluding HIV ¹²	21	172	106
Diagnosis, treatment prescription or follow-up for TB ⁸	29	233	64
HIV testing and counseling (HTC) services ⁵	14	109	69
HIV/AIDS antiretroviral prescription or treatment follow-up services ⁶	5	37	7
HIV/AIDS care and support services ⁷	13	103	35
Laboratory diagnostic services ¹⁵	0	1	1
Total	-	802	292

¹ Routine series of Pentavalent, polio, and measles vaccinations offered from the facility, excluding any outreach services

² Facility provides, prescribes, or counsels clients on any of the following: contraceptive pills (combined or progestin-only), injectable (progestin-only), implants, IUCDs, male condoms, female condoms, female sterilization (tubal ligation), male sterilization (vasectomy), or periodic abstinence method.

⁵ Facility reports that it has the capacity to conduct HIV testing in the facility, either by rapid diagnostic testing or ELISA, and an unexpired HIV rapid diagnostic test kit is available in the facility on the day of the survey, or other test capability is available.

⁶ Facility reports that providers in the facility prescribe antiretroviral (ARV) treatment and/or provide clinical follow-up for clients on ARV treatment. Outreach ART facilities are included in this definition.

⁷ Facility reports that providers in the facility prescribe or provide any of the following:

- Treatment for any opportunistic infections or for symptoms related to HIV/AIDS, including treatment for topical fungal infections;

- Systematic intravenous treatment for specific fungal infections such as cryptococcal meningitis;

- Treatment for Kaposi's sarcoma;

- Palliative care, such as symptom or pain management, or nursing care for terminally ill or severely debilitated patients;

- Nutritional rehabilitation services, including client education, provision of nutritional or micronutrient supplementation;

- Fortified protein supplementation;

- Care for pediatric HIV/AIDS patients;

- Preventive treatment for TB, i.e., isoniazid with pyridoxine;

- Primary preventive treatment for opportunistic infections, such as cotrimoxazole preventive treatment;

- General family planning counseling and/or services for HIV-positive clients;

- Condoms

⁸ Facility reports that providers assigned to the facility diagnose TB, prescribe treatment for TB, or provide TB treatment follow-up services for clients put on treatment elsewhere.

⁹ Facility reports that it offers malaria diagnosis and/or treatment services. Also, facilities offering curative care for sick children where providers of sick child services were found on the day of the survey to be making diagnosis of malaria or offering treatment for malaria were counted as offering malaria diagnosis and/or treatment services.

¹⁰ Child Growth Monitoring services: Growth monitoring is the regular monitoring of a "well" child, to see how s/he is developing. It usually involves measurement of a child's weight and height from birth through age 5 years. The rate of growth is checked against a chart to assure they were within

an acceptable range. These services are usually offered from "well baby" clinics. We are interested in whether the facility offers these services, either in the facility or as outreach.

¹¹ Normal delivery refers to a birth that is vaginal, spontaneous in onset, low-risk at the start of labor, and remaining so through labor and delivery. Delivery services are almost always with newborn care services, which refer to treatment received by a newborn child from the date of birth and for the first four weeks of life.

¹² These include any service to diagnose or treat sexually transmitted infections, excluding HIV infection.

¹⁵ These include the collection of specimen, and diagnostic tests, including rapid diagnostic tests. Note that for the purposes of this assessment, a laboratory does not necessarily require the availability of a specific or designated laboratory building, but the mere presence of the ability to conduct tests in the facility. It may be a room in a facility, with equipment set up to conduct various tests.

Among all health facilities excluding health posts, the services the most available are emergency service (97 percent) followed by curative care for sick children, diagnostic or treatment of malaria and diagnostic or treatment of STIs services (93 percent independently for all). Intensive care unit (ICU) services are available only in 1 percent of all facilities excluding health posts.

Curative care for sick children services (96 percent), family planning services (94 percent) and Antenatal care services are the most available services at health post level but no laboratory diagnostic services were found as expected.

3.2 Availability of Basic Client Services

Table 3.3 presents information on the availability of basic maternal and child health services, family planning services, and services for adult sexually transmitted diseases, both individually and as a package. Availability of a package of services contributes to ease of access and use of services.

Table 3.3 Availability of basic client services

Among all facilities, the percentages offering indicated basic client services and all basic client services, by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Child vaccination services	Child growth monitoring services	Curative care services for children under age 5	Any modern family planning services	Antenatal care (ANC) services	Services for STI	All basic client services ¹	Number of facilities
Facility type								
Referral Hospital	78	72	88	88	91	100	63	2
General Hospital	74	78	97	89	94	98	67	7
Primary Hospital	81	81	100	90	94	100	71	3
Health Center	89	89	99	98	99	99	82	182
Health Post	82	83	96	90	92	21	13	802
Higher Clinic	8	19	74	51	55	97	4	13
Medium Clinic	7	15	88	74	55	97	3	37
Lower Clinic	2	5	86	78	52	82	0	119
Managing authority								
Government/public	84	85	96	92	93	36	26	990
Other governmental (military, prison, federal)	3	0	86	6	33	100	0	4

police)								
Private for profit	1	7	86	78	53	86	1	163
NGO (mission/faith-based, nonprofit)	67	74	96	31	80	94	23	8
Region								
Tigray	81	87	91	90	88	48	35	54
Afar	52	34	100	73	83	69	19	14
Amhara	67	75	96	94	89	39	20	269
Oromia	78	75	94	86	87	45	27	432
Somali	62	50	95	60	74	92	25	39
Benishangul Gumuz	83	64	97	98	91	45	33	21
SNNP	74	80	96	98	95	31	15	285
Gambella	47	21	91	77	49	62	10	10
Harari	59	63	86	77	70	71	32	3
Addis Ababa	17	22	82	58	45	95	14	31
Dire Dawa	63	67	84	80	72	93	60	5
Urban/rural								
Urban	38	39	87	79	69	79	29	176
Rural	78	79	96	91	91	38	21	989
Total	72	73	95	89	87	44	22	1,165

¹ Basic client services include outpatient curative care for sick children, child growth monitoring, facility-based child vaccination services, any modern methods of family planning, antenatal care, and services for sexually transmitted infections (STI).

The basic services assessed by the 2014 ESPA+ are each available, in 44 percent or more of all Ethiopian facilities. For example, curative care for sick children are available in 95 percent of all facilities; family planning services and antenatal care services are each available in 89 and 87 of all facilities; child growth monitoring and child vaccination services are each available in 73 and 72 percent. STI services are the least likely of the basic services to be available, in just 44 percent of all facilities.

On average, about one-fifth (22 percent) of all facilities offer all basic services. In general, about seven of ten hospitals and eight of ten health centres offer all basic services. Around one tenth of health posts offer all basic services. Clinics are much less likely to offer all basic services, at less than 5 percent. Higher clinic, medium clinic and lower clinic are also less likely to offer child growth monitoring services (19, 15 and 5 percent respectively), and child vaccination services (8, 7 and 2 percent respectively). In health posts, availability of these basic services varies widely; only one-fifth (21 percent) offer STIs services while majority offer curative care for sick children, antenatal care services and family planning services.

Government and NGO (mission/faith-based, non profit) facilities are most likely to offer each of the basic services. However, there is considerable variation among private for profit and other government facilities. For example, although nine of every ten private for profit facilities offer child curative care and STI services, only 1 percent offer child vaccination services.

Six in ten facilities in Dire Dawa region offer all basic client services compared with only one in ten in Addis Ababa and Gambella region.

Basic Amenities for Client Services

Although good services can be provided in minimal service delivery settings, both clients and providers are more likely to be satisfied with a facility that has basic amenities and infrastructure such as a regular source of electricity, supply of improved water, and basic sanitation. Tables 3.4 and 3.5 present information on availability of basic amenities for client services.

Table 3.4 Availability of basic amenities for client services

Among all facilities **excluding health posts**, the percentages with indicated amenities considered basic for quality services, and the average travel time to the ambulance station in minutes by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Amenities									Average travel time to the ambulance station in minutes ⁸	Number of facilities excluding health posts
	Regular electricity ¹	Connected to Power grid ⁹	Improved water source ²	Piped Water ¹⁰	Visual and auditory privacy ³	Client latrine ⁴	Communication equipment ⁵	Computer with Internet ⁶	Emergency transport ⁷		
Facility type											
Referral Hospital	100	100	97	97	97	97	88	63	84	5	2
General Hospital	95	97	93	88	96	97	86	51	91	14	7
Primary Hospital	88	94	92	90	100	85	77	38	96	5	3
Health Center	57	54	71	44	94	78	30	4	91	46	182
Higher Clinic	84	100	96	96	93	95	93	32	66	9	13
Medium Clinic	61	97	96	90	98	86	72	5	40	12	37
Lower Clinic	32	71	77	43	88	59	60	3	34	37	119
Managing authority											
Government/public	59	55	72	46	94	79	32	6	91	45	190
Other governmental (military, prison, federal police)	78	100	86	86	97	100	97	28	47	-	2
Private for profit	42	80	83	57	90	67	67	6	37	28	163
NGO (mission/faith-based, nonprofit)	77	64	89	64	98	88	39	27	79	51	8
Region											
Tigray	64	83	86	69	98	86	45	8	87	18	22
Afar	70	59	45	37	99	88	53	8	67	37	5
Amhara	45	65	79	50	87	71	48	5	69	61	87
Oromia	49	60	74	47	92	67	45	3	64	35	116
Somali	78	46	48	35	95	81	15	12	66	161	8
Benishangul											
Gumuz	47	70	76	36	91	82	34	6	60	48	4
SNNP	50	66	72	43	95	71	44	8	65	33	80
Gambella	68	29	77	22	77	77	45	0	45	21	6
Harari	63	94	94	89	86	94	86	11	51	15	2
Addis Ababa	60	98	97	94	97	97	78	17	59	20	31
Dire Dawa	82	94	96	90	96	98	88	28	66	14	3
Urban/rural											
Urban	52	97	94	83	95	80	69	11	59	23	149

Rural	51	46	65	30	90	70	33	3	71	49	214
Total	52	67	77	52	92	74	48	7	66	41	363

Note: The indicators presented in this table comprise the basic amenities domain for assessing general service readiness within the health facility assessment methodology proposed by WHO and USAID (WHO 2012).

1 Facility is connected to a central power grid and there has not been an interruption in power supply lasting for more than two hours at a time during normal working hours in the seven days before the survey, or facility has a functioning generator or inverter with fuel available on the day of the survey, or else facility has back-up solar power.

2 Water is piped into facility or piped onto facility grounds or bottled water is used, or else water from a public tap or standpipe, a tube well or borehole, a protected dug well, protected spring, or rain water, and the outlet from this source is within 500 meters of the facility.

3 A private room or screened-off space available in the general outpatient service area that is a sufficient distance from other clients so that a normal conversation could be held without the client being seen or heard by others.

4 The facility had a functioning flush or pour-flush toilet, a ventilated improved pit latrine, pit latrine with slab, or composting toilet.

5 The facility had a functioning land-line telephone, a functioning facility-owned cellular phone or wireless telephone, a private cellular phone that is supported by the facility, or a functioning short wave radio available in the facility.

6 The facility had a functioning computer with access to the internet that is not interrupted for more than two hours at a time during normal working hours, or facility has access to the internet via a cellular phone inside the facility.

7 The facility had a functioning ambulance or other vehicle for emergency transport that is stationed at the facility and had fuel available on the day of the survey, or facility has access to an ambulance or other vehicle for emergency transport that is stationed at another facility or that operates from another facility.

8 For facilities with access to an ambulance or other vehicle for emergency transport that is stationed at another facility or that operates from another facility, the time taken (in minutes) to travel from the facility to the ambulance station on different road types (all weather road, dry weather road, foot path/rail) by different mode of transport (car, cart, foot, or motorcycle).

9 Facility is connected to a central power grid

10 Water is piped into facility or piped onto facility grounds

Table 3.5 Availability of basic amenities for client services at health posts

Among all health posts, the percentages with indicated amenities considered basic for quality services, the average travel time to the ambulance station in minutes by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Amenities									Number of facilities
	Regular electricity ¹	Connected to Power grid ⁹	Improved water source ²	Piped Water ¹⁰	Visual and auditory privacy ³	Client latrine ⁴	Communication equipment ⁵	Emergency transport ⁶	Average travel time to the ambulance station in minutes ⁷	
Facility type										
Health Post	29	5	45	3	78	51	14	72	42	802
Managing authority										
Government/public	29	5	45	3	78	52	14	72	41	800
Other governmental (military, prison, federal police)	0	0	0	0	100	0	0	100	360	2
Region										
Tigray	44	16	40	4	96	76	12	84	33	33
Afar	50	5	55	14	95	86	50	77	50	10
Amhara	54	11	63	6	63	49	14	71	28	182
Oromia	18	2	39	2	75	55	14	61	51	316
Somali	15	0	40	5	85	65	10	75	138	31
Benishangul Gumuz	10	7	52	0	83	66	0	86	41	17
SNNP	24	3	39	0	92	39	13	84	32	205
Gambella	15	0	67	0	74	67	30	52	23	4
Harari	24	38	52	10	100	100	38	81	22	1

Dire Dawa	42	26	65	42	94	90	0	97	21	2
Urban/rural										
Urban	28	48	50	28	79	57	1	92	34	26
Rural	29	4	45	2	78	51	14	71	43	776
Total	29	5	45	3	78	51	14	72	42	802

Note: The indicators presented in this table comprise the basic amenities domain for assessing general service readiness within the health facility assessment methodology proposed by WHO and USAID (WHO 2012).

1 Facility is connected to a central power grid and there has not been an interruption in power supply lasting for more than two hours at a time during normal working hours in the seven days before the survey, or facility has a functioning generator or inverter with fuel available on the day of the survey, or else facility has back-up solar power.

2 Water is piped into facility or piped onto facility grounds or bottled water is used, or else water from a public tap or standpipe, a tube well or borehole, a protected dug well, protected spring, or rain water, and the outlet from this source is within 500 meters of the facility.

3 A private room or screened-off space available in the general outpatient service area that is a sufficient distance from other clients so that a normal conversation could be held without the client being seen or heard by others.

4 The facility had a functioning flush or pour-flush toilet, a ventilated improved pit latrine, pit latrine with slab, or composting toilet.

5 The facility had a functioning land-line telephone, a functioning facility-owned cellular phone or wireless telephone, a private cellular phone that is supported by the facility, or a functioning short wave radio available in the facility.

6 The facility had a functioning computer with access to the internet that is not interrupted for more than two hours at a time during normal working hours, or facility has access to the internet via a cellular phone inside the facility.

7 The facility had a functioning ambulance or other vehicle for emergency transport that is stationed at the facility and had fuel available on the day of the survey, or facility has access to an ambulance or other vehicle for emergency transport that is stationed at another facility or that operates from another facility.

8 For facilities with access to an ambulance or other vehicle for emergency transport that is stationed at another facility or that operates from another facility, the time taken (in minutes) to travel from the facility to the ambulance station on different road types (all weather road, dry weather road, foot path/rail) by different mode of transport (car, cart, foot, or motorcycle).

9 Facility is connected to a central power grid

10 Water is piped into facility or piped onto facility grounds

In general, about half of the facilities have *regular, uninterrupted* electricity (i.e., the facility is connected to a central power grid, or has solar power or both, and power is routinely available during regular service hours), or has a functioning generator with fuel. As expected, all hospitals regardless of type (88 to 100 percent) and higher clinics (84 percent) are more likely than medium clinics and health centres (61 and 57 percent respectively) to have regular, uninterrupted electricity. Lower clinics are the least likely. Other government facilities and NGO facilities are also more likely than private and Government facilities to have regular, uninterrupted electricity. Fewer than 3 in ten health posts have regular, uninterrupted electricity

In general, over three quarter of all facilities have an *improved water source* in the facility (i.e., water is piped into the facility or onto facility grounds, or else water is from a public tap or standpipe, a tube well or borehole, a protected dug well, or protected spring, or rain water, or bottle water), and the outlet from this source is within 500 metres of the facility. However, health centres are less likely than other types of facilities to have an improved water source (71 percent). Forty five percent of health posts have an improved water source.

On average, fewer than three of every four facilities (74 percent) have a *functioning client latrine*. However lower clinics (59 percent) as well as health facilities managed by Private for profit (67 percent) are less likely to have a functioning client latrine. A little over half of health posts have a functioning client latrine.

Overall, *transport for emergencies* is available in two third of all facilities (i.e., the facility has a functioning ambulance or other vehicle for emergency transport that is stationed at the facility and had fuel available on the day of the survey), or else the facility has access to an ambulance or other vehicle stationed at or operating from another facility. Medium clinics and lower clinics are least likely to have emergency transport, at 40 percent and 34 percent respectively. Over seven of every ten health posts have emergency transport.

Among all facilities, a little over forty minutes is the average travel time from the health facility to the ambulance station. It takes an average of 5 minutes for hospitals. In Somali region, an average of over two hours is required to reach an ambulance station (138 minutes for health posts and 161 minutes for all other health facilities).

Laboratory Diagnostic Capacity

The capacity of a health facility to conduct laboratory diagnostic test enhance greatly the level of service provision. Health facilities do not necessarily require the availability of a specific or designated laboratory building, but the mere presence of tests in the facility including the availability of reagents and equipment needed for each test depending on the level of the facility type. Tables 3.6.1 to 3.6.4 present information on availability of basic and advanced level diagnostic test capacity in the facility

Table 3.6.1 Laboratory diagnostic capacity

Among all facilities excluding health posts, the percentages with capacity to conduct basic and advanced laboratory diagnostic tests in the facility, by facility type, managing authority and urban/rural, Ethiopia SPA+ 2014

Laboratory tests	Facility type							Government/public	Managing authority		NGO (mission/faith-based, nonprofit)	Urban/rural		Total	
	Referral Hospital	General Hospital	Primary Hospital	Health Center	Higher Clinic	Medium Clinic	Lower Clinic		Other governmental (military, prison, federal police)	Private for profit		Urban	Rural		
Basic tests															
Hemoglobin	100	85	67	24	65	51	0	27	9	17	40	37	13	23	
Blood glucose	84	90	75	20	82	77	3	22	75	25	46	44	11	24	
Malaria diagnostic test	78	85	88	82	82	71	6	82	78	25	50	56	56	56	
Urine protein	97	95	98	59	89	81	4	61	75	29	34	58	37	46	
Urine glucose	97	95	96	51	89	80	6	53	75	29	33	56	32	42	
HIV diagnostic test	100	98	96	94	72	45	6	94	94	19	58	54	63	59	
DBS collection	47	55	40	17	10	0	0	19	3	2	5	15	8	11	
TB microscopy	81	79	77	52	70	46	0	53	11	16	29	44	30	36	
Syphilis rapid diagnostic test	81	76	69	34	86	58	1	36	69	20	34	41	21	29	
General microscopy	84	82	85	62	85	72	2	63	28	23	57	51	41	45	
Urine pregnancy test	100	95	94	59	89	89	3	61	78	29	50	58	38	46	
Liver or renal function test (ALT or Creatinine)	91	70	44	2	71	17	0	4	6	11	11	17	1	7	
Advanced level diagnostic tests															
Serum electrolytes (chemistry analyzer)	97	72	63	8	43	23	0	11	6	10	20	18	5	10	
Full blood count with differentials	97	72	63	8	43	23	0	11	6	10	20	18	5	10	
Blood typing and cross matching	19	12	6	5	7	5	0	5	0	2	0	3	4	3	
CD4 count	78	47	44	2	4	0	0	5	6	0	10	6	1	3	
Syphilis	31	28	29	3	14	1	0	4	3	2	4	6	1	3	

serology															
Gram stain	94	94	69	15	88	62	1	18	6	23	18	39	7	20	
Stool															
microscopy	84	80	85	57	81	71	2	58	28	23	57	48	37	42	
CSF/ body fluid															
counts	97	98	96	57	97	90	3	58	78	29	61	63	33	45	
TB culture	3	1	0	0	0	0	0	0	0	0	0	0	0	0	
TB rapid															
diagnostic test	6	6	0	1	6	0	0	1	0	1	0	1	1	1	
Equipment for diagnostic imaging															
X-ray machine	75	73	48	0	37	3	0	3	6	5	6	8	1	4	
Ultrasonogram	88	72	52	0	68	8	0	3	6	9	13	12	1	6	
CT scan	13	7	0	0	3	0	0	0	0	1	0	1	0	0	
Number of facilities excluding health posts															
	2	7	3	182	13	37	119	190	2	163	8	149	214	363	

Note: The basic test indicators presented in this table comprise the diagnostic capacity domain for assessing general service readiness within the health facility assessment methodology proposed by WHO and USAID (WHO 2012).

Note: DBS = dried blood spot; CSF = cerebrospinal fluid; CT = computed tomography

Table 3.6.2 Laboratory diagnostic capacity in health posts

Among all health posts, the percentages with capacity to conduct basic and advanced laboratory diagnostic tests in the health post, by facility type, managing authority and urban/rural, Ethiopia SPA+ 2014

Laboratory tests	Facility type			Urban/rural		Total
	Health Post	Government/public	Other governmental (military, prison, federal police)	Urban	Rural	
Basic tests						
Malaria diagnostic test	53	53	0	44	54	53
HIV diagnostic test	14	14	0	21	13	14
Number of health posts	802	800	2	26	776	802

Note: The basic test indicators presented in this table comprise the diagnostic capacity domain for assessing general service readiness within the health facility assessment methodology proposed by WHO and USAID (WHO 2012).

Table 3.6.3 Laboratory diagnostic capacity

Among all facilities excluding health posts, the percentages with capacity to conduct basic and advanced laboratory diagnostic tests in the facility by region, Ethiopia SPA+ 2014

Laboratory tests	Region												Total
	Tigray	Afar	Amhara	Oromia	Somali	Benishangul Gumuz	SNNP	Gambella	Harari	Addis Ababa	Dire Dawa		
Basic tests													
Hemoglobin	33	25	17	22	20	16	16	2	51	54	52		23
Blood glucose	48	46	17	15	32	30	18	2	49	73	64		24
Malaria diagnostic test	76	32	51	53	79	49	50	46	71	75	66		56
Urine protein	74	52	41	44	48	45	32	9	89	81	72		46
Urine glucose	73	52	40	36	47	37	28	9	89	82	72		42
HIV diagnostic test	83	78	58	63	72	44	55	22	49	45	72		59
DBS collection	13	5	14	15	6	0	3	2	14	10	12		11
TB microscopy	57	41	36	32	32	24	30	8	60	55	58		36
Syphilis rapid diagnostic test	46	40	22	28	33	17	21	12	34	62	44		29
General microscopy	70	53	35	40	56	40	45	17	66	72	68		45
Urine pregnancy test	80	50	40	38	44	47	42	12	89	84	76		46
Liver or renal function test (ALT or Creatinine)	11	5	5	2	6	3	4	0	43	41	38		7
Advanced level diagnostic tests													
Serum electrolytes (chemistry analyzer)	22	14	4	9	14	9	5	1	37	38	38		10
Full blood count with differentials	22	14	4	9	14	9	5	1	37	38	38		10
Blood typing	11	5	2	4	2	5	0	0	6	6	10		3

and cross matching												
CD4 count	5	5	3	3	3	3	2	0	9	3	8	3
Syphilis serology	8	4	3	1	2	5	1	0	11	13	16	3
Gram stain	37	11	14	12	26	20	17	5	60	68	34	20
Stool microscopy	58	51	32	37	46	36	42	15	63	70	62	42
CSF/ body fluid counts	71	43	30	44	54	57	40	15	86	84	76	45
TB culture	0	0	0	0	0	0	0	0	0	0	0	0
TB rapid diagnostic test	0	3	0	1	0	0	1	0	0	4	2	1
Equipment for diagnostic imaging												
X-ray machine	6	4	3	2	7	3	1	1	11	16	12	4
Ultrasonogram	10	7	3	3	7	2	3	2	29	26	18	6
CT scan	1	0	0	0	0	0	0	0	3	2	2	0
Number of facilities excluding health posts	22	5	87	116	8	4	30	6	2	31	3	363

Note: The basic test indicators presented in this table comprise the diagnostic capacity domain for assessing general service readiness within the health facility assessment methodology proposed by WHO and USAID (WHO 2012).

Note: DBS = dried blood spot; CSF = cerebrospinal fluid; CT = computed tomography

Table 3.6.4 Laboratory diagnostic capacity at health post by region

Among all health posts, the percentages with capacity to conduct basic and advanced laboratory diagnostic tests in the health post by region, Ethiopia SPA+ 2014

Laboratory tests	Region											Total
	Tigray	Afar	Amhara	Oromia	Somali	Benishangul Gumuz	SNNP	Gambella	Harari	Dire Dawa		
Basic tests												
Malaria diagnostic test	96	82	71	36	35	79	55	63	38	71		53
HIV diagnostic test	60	36	14	9	5	7	13	0	38	68		14
Number of health posts	33	10	182	316	31	17	205	4	1	2		802

Note: The basic test indicators presented in this table comprise the diagnostic capacity domain for assessing general service readiness within the health facility assessment methodology proposed by WHO and USAID (WHO 2012).

In general, the capacity of a health facility to conduct laboratory diagnostic test, even the basic tests, is very low. Except for the capacity in conducting malaria diagnostic test and HIV diagnostic test, for which fewer than 6 of ten facilities excluding health posts could conduct the tests, only less than half of all facilities are able to conduct the remaining basic tests. Over half of health posts are able to conduct malaria diagnostic test while only one of ten health posts could perform a HIV diagnostic test.

Staffing Pattern in Surveyed Facilities

During the survey, data were collected from facilities in-charge about personnel assigned to, employed by or seconded to the facility, whether part time or full time. Tables 3.7 and 3.8 present the median number of providers assigned to, employed by or seconded to facility by type of providers and background characteristics.

Table 3.7 Staffing pattern in surveyed facilities

Among all facilities excluding health posts, median number of providers¹, assigned to, employed by, or seconded to facility, by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Median number of providers assigned to/ employed by/ seconded to facility												Number of facilities
	Medical specialist ²	General Practitioner	Health officer / Integrated Emergency Surgical Officer (IESO)	BSc nurse	Diploma nurse	Specialized nurse ³	BSc or Diploma midwife	Pharmacy Professional ⁴	Medical Lab Professional ⁵	Paramedics ⁶	Health extension worker	Supportive Staff ⁷	
Facility type													
Referral Hospital	14	22	7	48	74	4	16	18	19	13	-	91	2
General Hospital	4	6	2	5	33	1	7	6	7	4	-	44	7
Primary Hospital	-	5	4	3	17	1	6	6	6	3	-	25	3
Health Center	-	-	2	-	6	-	2	2	2	-	-	6	182
Higher Clinic	2	1	-	1	3	-	-	-	3	-	-	6	13
Medium Clinic	-	-	1	-	2	-	-	-	2	-	-	3	37
Lower Clinic	-	-	-	-	2	-	-	-	-	-	-	1	119
Managing authority													
Government/ public	-	-	2	1	6	-	2	2	2	-	-	6	190
Other governmental (military, prison, federal police)	-	-	-	-	3	-	-	1	1	-	-	7	2
Private for profit	-	-	-	-	2	-	-	-	-	-	-	2	163
NGO (mission/ faith-based, nonprofit)	-	-	-	-	4	-	-	-	1	-	-	4	8
Region													
Tigray	-	-	2	-	6	-	2	2	2	1	-	5	22
Afar	-	-	-	1	3	-	1	1	2	-	1	5	5
Amhara	-	-	-	-	4	-	1	-	-	-	-	3	87
Oromia	-	-	1	-	4	-	2	1	1	-	-	4	116
Somali	-	-	1	1	5	-	2	1	1	-	-	3	8
Benishangul Gumuz	-	-	1	-	4	-	2	1	2	-	-	4	4
SNNP	-	-	-	-	4	-	-	-	1	-	-	3	80
Gambella	-	-	-	-	3	-	-	-	-	-	-	2	6
Harari	1	-	-	-	2	-	-	-	2	-	-	4	2
Addis Ababa	-	-	1	-	2	-	-	-	3	-	-	4	31
Dire Dawa	-	-	1	1	4	-	-	1	2	-	-	7	3
Urban/rural													
Urban	-	-	1	-	3	-	-	-	2	-	-	3	149
Rural	-	-	-	-	5	-	2	1	1	-	-	4	214
Total	-	-	1	-	4	-	1	-	1	-	-	4	363

¹ Numbers provided by facility in-charge

² MD specialist includes General Surgeon, Anesthesiologist, Obstetrician and gynecologist, Internist, Pediatrician, psychiatrist, Radiologist, and other Service Specialist.

³ includes neonatology nurse, ophthalmic nurse, public health nurse etc...

⁴ Includes BSc or Diploma pharmacy

⁵ Includes MSC, BSc or diploma laboratory technicians and Microbiologists

⁶ includes environmental health, health informatics/information technician, biomedical engineer, radiology technician/technologist, physiotherapy professional and dietician

⁷ includes Administration and finance, cleaners, compliance handling officer, maintenance personnel, morgue attendant, reception, social worker etc...

Table 3.8 Staffing pattern in surveyed health posts facilities

Among all health posts, median number of providers¹, assigned to, employed by, or seconded to facility, by type of provider at health posts, Ethiopia SPA+ 2014

Background characteristics	Median number of providers assigned to/ employed by/ seconded to facility		Number of health posts
	Non-degree nursing professional ⁴	Health extension worker	
Facility type			
Health Post	-	2	802
Managing authority			
Government/public	-	2	800
Other governmental (military, prison, federal police)	-	-	2
Region			
Tigray	-	2	33
Afar	1	1	10
Amhara	-	2	182
Oromia	-	2	316
Somali	-	2	31
Benishangul Gumuz	1	2	17
SNNP	-	2	205
Gambella	-	2	4
Harari	-	2	1
Dire Dawa	-	3	2
Urban/rural			
Urban	1	1	26
Rural	-	2	776
Total	-	2	802

¹ Numbers provided by facility in-charge

⁴ Nurse (diploma) and Midwives (diploma)

Note: “-“means that median number is less than one.

The findings of the 2014 ESPA+ show that general practitioner and medical specialists are more available in referral hospitals than in other facility type. The median number of general practitioner and medical specialists is 22 and 14 respectively, meaning that 50 percent of the referral hospitals have a least 22 physicians and 14 medical specialists. The median number of physician is 6 in general hospital, 5 in primary hospitals, and 1 in higher clinics. It's less than one in other facility type. Diploma nurses and degree nurses were the more frequent provider type. Half of health posts had at least two health extension workers.

Health facilities managed by the government provided the most median number of providers.

3.3 Child Health Services

The 2014 ESPA+ used the Integrated Management of Childhood Illnesses (IMCI) guidelines as the basis for assessing the provision of child health services. These guidelines are based on two major principles: (1) that all sick children should be routinely assessed for *major symptoms* (fever, cough, or difficult breathing; diarrhoea; ear pain or discharge; nutrition and immunisation status; feeding problems; and other potential problems) and (2) that all children should be examined for *general danger signs* that indicate the need for immediate referral or admission to a hospital. Observations of sick child consultations provided the information needed to determine whether providers were adhering to standards for providing quality services.

As evident in Tables 3.9, outpatient curative care for sick children is available in almost all facilities (95 percent). Growth monitoring (73 percent) and child vaccination (72 percent) are less widely available services. Lower clinics are the facilities least likely to offer growth monitoring or vaccination services. Overall, only six of ten health facilities (62 to 63 percent) offer the entire basic array of child health services regardless of vaccines considered (i.e., growth monitoring, vaccination, and curative care for sick children). Health centres and primary hospitals (82 percent and 75 percent, respectively) are the facilities most likely to offer all basic child health services. The managing authorities with the highest likelihood of providing all basic child health services are the government (73 to 74 percent) and NGO (mission/faith-based, non profit) (60 percent). Availability of all basic services by region varies, from at least six of ten health facilities in Tigray (78 percent), in SNNP (67-70 percent), in Oromia (65 percent), in Amhara (64 percent) and in Dire Dawa (60 percent) to only 15 percent of facilities in Addis Ababa.

Table 3.9 Availability of child health services

Among all facilities, the percentages offering specific child health services at the facility, by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Percentage of facilities that offer:							Number of facilities
	Outpatient curative care for sick children	Growth monitoring	Child vaccination ¹	All three basic child health services	Child vacc+ ²	All three basic child health services, including all vaccines ³	Routine vitamin A supplementation	
Facility type								
Referral Hospital	88	72	78	63	78	63	47	2
General Hospital	97	78	74	68	74	68	67	7
Primary Hospital	100	81	81	75	81	75	73	3
Health Center	99	89	89	82	88	82	85	182
Health Post	96	83	82	72	81	71	83	802
Higher Clinic	74	19	8	7	8	7	5	13
Medium Clinic	88	15	7	6	7	6	8	37
Lower Clinic	86	5	2	1	2	1	3	119
Managing authority								
Government/ public	96	85	84	74	82	73	83	990
Other governmental (military, prison, federal police)	86	0	3	0	3	0	2	4
Private for profit	86	7	1	1	1	1	3	163

NGO (mission/ faith-based, nonprofit)	96	74	67	60	67	60	68	8
Region								
Tigray	91	87	81	78	81	78	79	54
Afar	100	34	52	25	49	25	73	14
Amhara	96	75	67	64	67	64	80	269
Oromia	94	75	78	65	78	65	70	432
Somali	95	50	62	38	61	37	72	39
Benishangul Gumuz	97	64	83	53	83	53	15	21
SNNP	96	80	74	70	70	67	78	285
Gambella	91	21	47	21	41	20	21	10
Harari	86	63	59	55	59	55	61	3
Addis Ababa	82	22	17	15	16	15	14	31
Dire Dawa	84	67	63	60	63	60	63	5
Urban/rural								
Urban	87	39	38	35	35	32	37	176
Rural	96	79	78	68	77	68	78	989
Total	95	73	72	63	71	62	72	1,165

¹ Routine provision of pentavalent (DPT+HepB+HiB), polio, and measles vaccination in the facility to children

² Routine provision of pentavalent (DPT+HepB+HiB), polio, measles, BCG, and pneumococcal vaccination in the facility

³ Includes outpatient curative care for sick children, growth monitoring, and all five child vaccinations.

Child Vaccines

The availability of child vaccines was assessed only in facilities that reported offering vaccination services and that also stored vaccines at the facility for use. Detailed information on vaccine availability on the day of the survey is presented in Table 3.10.

Individually, pentavalent, polio, measles, BCG and pneumococcal conjugate vaccines were available on the day of the survey in more than three-quarters of the assessed facilities. However, collectively, only about six in ten facilities had all the basic child vaccines available in the facility on the day of the survey. Health posts were the least likely to have all the basic child vaccines in stock (24 percent) compared with other facility types. Similarly, facilities managed by government were least likely to have all the basic vaccines in stock (55 percent) compared with facilities managed by other authorities (between 77 percent to 100 percent). Gambella region had the lowest availability of vaccines (39 percent) while Addis Ababa (84 percent), Tigray and Benishangul Gumuz (81 percent respectively) had the highest availability of vaccines.

Table 3.10 Availability of vaccines

Among facilities that offer child vaccination services and routinely store vaccines at the facility, the percentages having unexpired indicated vaccines observed on the day of the survey, by background characteristics, Ethiopia SPA+ 2014

Percentage of facilities offering child vaccination services and storing vaccines where the following vaccines were observed:								Number of facilities offering child vaccination services and storing vaccines
Background characteristics	Pentavalent ¹	Oral polio vaccine	Measles vaccine	All three vaccines Penta+Polio+Measles ²	BCG vaccine	Pneumococcal conjugate vaccine	All basic child vaccines ³	
Facility type								
Referral Hospital	100	91	95	86	86	91	73	1
General Hospital	98	91	95	90	85	93	80	5
Primary Hospital	100	93	93	88	83	95	71	2
Health Center	95	85	94	81	75	89	58	152
Health Post	88	31	87	30	73	88	24	22
Higher Clinic	100	100	100	100	100	100	100	1
Medium Clinic	100	40	100	40	40	100	40	1
Lower Clinic	100	100	100	100	100	100	100	2
Managing authority								
Government/ public	94	79	93	75	75	89	55	180
Other governmental (military, prison, federal police)	100	100	100	100	100	100	100	0
Private for profit	94	89	89	86	89	92	80	2
NGO (mission/ faith-based, nonprofit)	100	80	100	80	78	99	77	4
Region								
Tigray	100	98	98	95	86	98	81	18
Afar	80	56	72	56	61	80	48	3
Amhara	98	65	96	61	88	94	49	50
Oromia	98	89	96	84	73	87	57	64
Somali	79	65	81	63	56	76	48	11
Benishangul Gumuz	91	95	86	81	91	86	81	2
SNNP	85	76	91	73	60	91	45	29
Gambella	74	65	63	53	45	68	39	2
Harari	76	71	82	71	76	65	59	1
Addis Ababa	100	99	97	97	86	95	84	5
Dire Dawa	84	81	78	73	62	86	57	2
Urban/rural								
Urban	97	95	98	92	90	94	79	52
Rural	93	73	91	69	70	88	47	135

Total	94	79	93	75	75	89	56	186
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Note: The measures presented in this table comprise the indicators included as part of the medicines and commodities domain for assessing readiness to provide routine child vaccination services within the health facility assessment methodology proposed by WHO and USAID (WHO 2012).

¹ Pentavalent = DPT + hepatitis B + haemophilus influenza B.

² At least one unexpired vial or ampoule each of pentavalent (DPT+HepB+HiB) vaccine, oral polio vaccine, and measles vaccine with relevant diluents available.

³ At least one unexpired vial or ampoule each of pentavalent vaccine, oral polio vaccine, measles vaccine, BCG vaccine and pneumococcal conjugate vaccine with relevant diluents.

3.4 Family Planning Services

Tables 3.11 and 3.12 provide information on the availability of family planning services in all facilities. Ninety percent of health posts and eighty-seven percent of all other facilities type in Ethiopia offer temporary modern family planning methods. Availability of temporary modern family planning methods varies from 74 percent of medium clinics to 98 percent of health centres; higher clinics being an exception with only 50 percent. Practically all government-managed facilities (98 percent) and about eight out of every ten privately-managed facilities (78 percent) offer a temporary modern family planning method. Only three in ten of NGOs-managed facilities (30 percent) and one in ten other governments - managed facilities (11 percent) offer temporary modern family planning methods. Health facilities excluding health posts in six of eleven regions of Ethiopia have less than the national average ranging from 58 percent to 82 percent (Addis Ababa 58 percent, Harari 63 percent, Dire Dawa 68 percent, Somali 79 percent, Tigray 81 percent and Gambella 82 percent) in availability of temporary modern family planning methods. At health posts level only four regions (Somali 55 percent, Afar 64 percent, Gambella 70 percent and Oromia 84 percent) are below the national level in the availability of temporary modern family planning methods.

Overall, only about two of every ten health facilities offer male or female sterilisation services; that is, health workers in these facilities actually provide the service in the facility, or else they discuss this option with clients and then refer clients elsewhere to obtain the service.

Table 3.11 Availability of family planning services

Among all **facilities except health posts**, the percentages offering temporary methods of family planning and male or female sterilization and the percentage offering any family planning, by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Temporary methods of family planning (FP)						Number of facilities excluding health posts
	Percentage offering any temporary modern method of FP ¹	Percentage offering counseling on periodic abstinence/rhythm	Percentage offering any temporary method of FP ²	Percentage offering male or female sterilization ³	Percentage offering any modern FP ⁴	Percentage offering any FP ⁵	
Facility type							
Referral Hospital	88	75	88	69	88	88	2
General Hospital	89	78	89	58	89	89	7
Primary Hospital	90	73	90	50	90	90	3
Health Center	98	71	98	17	98	98	182
Higher Clinic	50	50	54	15	51	54	13
Medium Clinic	74	69	82	19	74	82	37
Lower Clinic	78	61	82	11	78	82	119
Managing authority							
Government/public	98	71	98	19	98	98	190
Other governmental (military, prison, federal police)	11	9	11	3	11	11	2
Private for profit	78	64	83	14	78	83	163
NGO (mission/faith-based, nonprofit)	30	25	31	13	31	31	8
Region							

Tigray	81	86	88	17	81	88	22
Afar	92	80	92	8	92	92	5
Amhara	93	74	95	19	93	95	87
Oromia	91	56	91	9	91	91	116
Somali	79	54	80	1	80	80	8
Benishangul Gumuz	89	58	97	6	89	97	4
SNNP	92	74	92	26	92	92	80
Gambella	82	71	82	12	82	82	6
Harari	63	57	63	26	63	63	2
Addis Ababa	58	59	67	18	58	67	31
Dire Dawa	68	64	68	22	68	68	3
Urban/rural							
Urban	80	69	83	24	80	83	149
Rural	93	65	94	11	93	94	214
Total	87	67	89	17	87	89	363

¹ Facility provides, prescribes, or counsels clients on any of the following temporary methods of family planning: contraceptive pills (combined or progestin-only), injectable (progestin-only), implants, intrauterine contraceptive devices (IUCDs), male condom, or female condom.

² Facility provides, prescribes, or counsels clients on any of the following temporary methods of family planning: contraceptive pills (combined or progestin-only), injectable (progestin-only), implants, IUCDs, male condoms, female condoms, or periodic abstinence.

³ Providers in the facility perform male or female sterilization or counsel clients on male or female sterilization.

⁴ Facility provides, prescribes, or counsels clients on any of the following: contraceptive pills (combined or progestin-only), injectable (progestin-only), implants, IUCDs, male condoms, female condoms, female sterilization (tubal ligation) or male sterilization (vasectomy).

⁵ Facility provides, prescribes, or counsels clients on any of the following: contraceptive pills (combined or progestin-only), injectable (progestin-only), implants, IUCDs, male condoms, female condoms, female sterilization (tubal ligation), male sterilization (vasectomy), or periodic abstinence.

Table 3.12 Availability of family planning services at health posts

Among **all health posts**, the percentages offering temporary methods of family planning and the percentage offering any family planning, by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Temporary methods of family planning (FP)					Number of health posts
	Percentage offering any temporary method of FP ¹	Percentage offering counseling on periodic abstinence/rhythm	Percentage offering any temporary method of FP ²	Percentage offering any modern FP ⁴	Percentage offering any FP ⁵	
Facility type						
Health Post	90	65	94	90	94	802
Managing authority						
Government/public	90	65	95	90	95	800
Other governmental (military, prison, federal police)	0	0	0	0	0	2
Region						
Tigray	96	92	100	96	100	33
Afar	64	64	68	64	68	10
Amhara	94	63	97	94	97	182
Oromia	84	64	93	84	93	316
Somali	55	25	55	55	55	31
Benishangul Gumuz	100	69	100	100	100	17
SNNP	100	71	100	100	100	205
Gambella	70	63	74	70	74	4
Harari	100	81	100	100	100	1
Dire Dawa	100	74	100	100	100	2
Urban/rural						
Urban	73	73	73	73	73	26
Rural	90	65	95	90	95	776
Total	90	65	94	90	94	802

¹ Health post provides, prescribes, or counsels clients on any of the following temporary methods of family planning: contraceptive pills (combined or progestin-only), injectable (progestin-only), male condom, or female condom.

² Facility provides, prescribes, or counsels clients on any of the following temporary methods of family planning: contraceptive pills (combined or progestin-only), injectable (progestin-only), implants, IUCDs, male condoms, female condoms, or periodic abstinence.

⁴ Facility provides, prescribes, or counsels clients on any of the following: contraceptive pills (combined or progestin-only), injectable (progestin-only), male condoms or female condoms.

⁵ Facility provides, prescribes, or counsels clients on any of the following: contraceptive pills (combined or progestin-only), injectable (progestin-only), male condoms or female condoms or periodic abstinence.

3.5 Antenatal Care, Prevention of Mother-to-Child Transmission of HIV, and Malaria services

Antenatal Care

Table 3.13 presents information on the availability of antenatal care (ANC) services and indicates how often these services are offered. The table also provides information on the availability of tetanus toxoid (TT) vaccine in facilities that offer ANC services.

Overall, 87 percent of all facilities offer ANC services. Over 90 percent of hospitals regardless of type, health centres and health posts offer ANC services, compared with a little over half of higher, medium and lower clinics. Government (93 percent) and NGO facilities (80 percent) are more likely than those managed by other authorities to offer antenatal care services.

In general, almost three-quarters (74 percent) of health facilities offer ANC services 5 or more days per week in over 90 percent of all health facilities regardless of type except for health posts. Almost two-thirds of health posts offer ANC services 5 days or more per week.

A significant proportion of facilities (78 percent) provide tetanus toxoid vaccine to pregnant women, but only 44 percent of facility that offer ANC services also offer TT vaccines every day that ANC services are offered.

Table 3.13 Availability of antenatal care services

Among all facilities, the percentage offering antenatal care (ANC) services and, among facilities offering ANC services, the percentages offering the service on the indicated number of days per week, and the percentages providing Tetanus Toxoid vaccine to pregnant women, by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Percentage of facilities that offer ANC	Number of facilities	Percentage of facilities offering ANC where ANC services are offered the indicated number of days per week ¹			Percentage of facilities providing tetanus toxoid vaccine to pregnant women ²	Tetanus toxoid vaccine every day ANC is offered	Number of facilities offering ANC
			1-2	3-4	5 or more days			
Facility type								
Referral Hospital	91	2	3	0	97	97	97	2
General Hospital	94	7	2	1	97	84	84	7
Primary Hospital	94	3	0	4	96	86	82	3
Health Center	99	182	3	0	97	92	87	180
Health Post	92	802	23	9	65	83	37	736

Higher Clinic	55	13	8	0	92	22	20	7
Medium Clinic	55	37	2	0	93	12	11	20
Lower Clinic	52	119	0	0	100	5	2	62
Managing authority								
Government/public	93	990	19	7	72	85	47	924
Other governmental (military, prison, federal police)	33	4	0	5	95	5	5	1
Private for profit	53	163	1	0	99	5	3	86
NGO (mission/faith-based, nonprofit)	80	8	10	0	76	86	78	6
Region								
Tigray	88	54	0	0	100	86	52	48
Afar	83	14	13	0	87	40	31	12
Amhara	89	269	4	2	93	81	52	239
Oromia	87	432	28	10	61	78	45	376
Somali	74	39	6	11	83	44	37	29
Benishangul Gumuz	91	21	6	0	93	82	28	19
SNNP	95	285	21	8	67	81	34	270
Gambella	49	10	16	6	75	74	47	5
Harari	70	3	8	13	79	44	38	2
Addis Ababa	45	31	4	0	96	40	40	14
Dire Dawa	72	5	2	0	98	83	74	3
Urban/rural								
Urban	69	176	6	0	90	55	52	122
Rural	91	989	19	7	72	81	42	896
Total	87	1,165	17	7	74	78	44	1,018

¹ Some facilities offer ANC services less often than one day per week, and so the total percentage may be less than 100 percent.

² Among facilities offering ANC services, the percentages providing tetanus toxoid vaccine to pregnant women.

Prevention of Mother-to-Child Transmission of HIV

Prevention of mother-to-child transmission (PMTCT) of HIV usually involves a four-pronged approach: (1) the primary prevention of HIV infection, (2) prevention of unintended pregnancies in HIV-positive women, (3) use of a comprehensive treatment package that includes antiretroviral (ARV) medicines for HIV-positive pregnant women, and (4) provision of comprehensive care to the mother, the newborn, and other family members. PMTCT services are often offered in conjunction with antenatal and delivery services. They may include a variety of interventions. The degree to which a facility offers the total package often reflects the level of staffing and whether the facility offers either antenatal care or delivery services, or both.

Table 3.14 first provides a summary measure assessing the availability of any PMTCT service among facilities that offer ANC services. The table also presents information on the availability of the individual interventions or components of PMTCT at facilities offering ANC and any PMTCT services.

In general, six of every ten ANC facilities provide PMTCT services. PMTCT services are universally available in hospitals and in 80 percent of health centres that offer ANC service. Eight of every ten government and NGO managed facilities that offer ANC services also offer some component of PMTCT services.

Among ANC facilities that offer PMTCT services, availability of each of the assessed components of PMTCT varies. (1) HIV testing and counselling for pregnant women are available in almost all facilities. (2) Infant and young child feeding counselling, (3) nutritional counselling for HIV-positive pregnant women and their infants, and (4) family planning counselling for HIV-positive pregnant women are each available in nine of every ten facilities. All remaining components of PMTCT are less available than the other services in about half of the facilities.

Table 3.14 Availability of services for prevention of mother-to-child transmission of HIV in facilities offering antenatal care services

Among facilities excluding health posts offering antenatal care (ANC) services, the percentages offering services for the prevention of mother-to-child transmission (PMTCT) of HIV and, among the facilities offering PMTCT services, the percentages with specific PMTCT program components, by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Percentage of facilities offering ANC that provide any PMTCT ¹	Number of facilities offering ANC	Percentage of ANC facilities offering PMTCT that provide:								Number of facilities offering ANC and any PMTCT services
			HIV testing for pregnant women	HIV testing for infants born to HIV+ women	ARV prophylaxis for HIV+ pregnant women	ARV prophylaxis for infants born to HIV+ women	Infant and young child feeding counseling	Nutritional counseling for HIV+ pregnant women and their infants	Family planning counseling for HIV+ pregnant women	ART to HIV+ pregnant women	
Facility type											
Referral Hospital	100	2	100	69	90	79	93	93	100	93	2
General Hospital	100	7	98	85	86	87	98	98	99	93	7
Primary Hospital	98	3	100	88	96	96	100	100	100	94	3
Health Center	80	180	97	48	53	55	90	90	93	54	144
Higher Clinic	55	7	100	47	62	48	80	96	97	62	4
Medium Clinic	40	20	100	26	18	12	88	93	82	23	8
Lower Clinic	12	62	61	0	0	0	43	55	70	0	8
Managing authority											
Government/public	81	187	97	49	55	56	91	91	93	56	152
Other governmental (military, prison, federal police)	10	1	100	49	49	49	49	49	49	49	0
Private for profit	21	86	89	28	29	26	67	77	84	27	19
NGO (mission/faith-based, nonprofit)	77	6	81	38	35	22	100	100	77	53	5

Region											
Tigray	83	18	94	65	76	76	93	94	93	76	15
Afar	44	4	100	42	85	85	100	100	100	78	2
Amhara	63	78	94	47	47	47	86	88	97	45	49
Oromia	58	88	97	52	69	69	89	89	92	69	51
Somali	43	7	100	49	26	24	100	100	100	38	3
Benishangul Gumuz	52	2	91	91	77	91	91	91	91	91	1
SNNP	67	65	96	30	24	26	87	87	83	30	43
Gambella	35	3	100	58	79	90	100	100	100	79	1
Harari	68	1	92	77	100	92	100	100	100	100	1
Addis Ababa	61	14	100	55	66	65	89	99	99	69	9
Dire Dawa	81	2	100	77	91	82	100	100	100	95	1
Urban/rural											
Urban	63	101	93	61	73	72	92	95	97	75	64
Rural	62	180	97	38	40	41	86	86	89	41	111
Total	62	281	96	47	52	52	88	90	92	53	175

Note: ARV = antiretroviral

¹ Facility provides any of the following services for the prevention of transmission of HIV from an HIV-positive pregnant woman to her child: HIV testing and counseling for pregnant women, HIV testing for infants born to HIV-positive women, ARV prophylaxis for HIV-positive pregnant women, ARV prophylaxis for infants born to HIV-positive women, infant and young child feeding counseling for prevention of mother-to-child transmission, nutritional counseling for HIV-positive pregnant women and their infants, family planning counseling for HIV-positive pregnant women, and ART to HIV-positive pregnant women.

Malaria Prevention and Treatment

Tables 3.15 and 3.16 present information on the availability, in facilities offering ANC, trained staff, insecticide-treated bed nets (ITNs), and medicines for malaria, as well as supplies and equipment for diagnosis of malaria.

In general, trained staff, and ITNs are available in about two of ten ANC facilities excluding health posts and in about three of ten ANC health posts. However, ACT for the treatment of malaria, malaria rapid diagnostic test kits and functioning microscope with glass slides and relevant stains for malaria microscopy are available in almost half of the ANC facilities on the day of the visit. Furthermore, less than a third (26 percent) of ANC facilities had the capacity to test for haemoglobin. Except for referral hospitals, not all hospitals had the capacity to test for haemoglobin (87 percent of general hospital and 69 percent of primary hospital).

Table 3.15 Malaria services in facilities offering antenatal care services

Among **facilities excluding health posts** offering antenatal care (ANC) services, the percentages having indicated items for the provision of malaria services available on the day of the survey, by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Percentage of facilities offering antenatal care services that have:			Medicines			Diagnostics			Number of facilities offering ANC
	Trained staff ¹	ITN ²	ACT ³	Quinine	Iron, folic acid or combined tablet	Malaria RDT ⁴	Malaria microscopy ⁵	RDT or microscopy	Hemoglobin ⁶	
Facility type										
Referral Hospital	17	14	62	66	93	10	83	83	100	2
General Hospital	20	19	68	60	90	32	80	85	87	7
Primary Hospital	27	35	82	61	80	29	86	88	69	3
Health Center	34	28	72	41	68	65	53	83	25	180
Higher Clinic	7	1	11	10	25	59	79	80	84	7
Medium Clinic	12	5	9	8	26	16	68	70	66	20
Lower Clinic	0	1	3	0	21	4	1	5	0	62
Managing authority										
Government/public	34	28	73	42	69	63	55	83	27	187
Other governmental (military, prison, federal police)	0	5	10	10	95	90	14	100	14	1
Private for profit	3	1	4	2	20	11	23	25	23	86
NGO (mission/faith-based, nonprofit)	17	21	40	29	79	15	42	54	44	6
Region										
Tigray	20	22	76	19	75	65	66	82	38	18
Afar	29	25	89	46	46	83	53	94	29	4
Amhara	29	18	52	31	58	38	37	57	17	78
Oromia	25	28	57	23	59	51	43	67	28	88
Somali	16	22	75	45	54	71	42	79	21	7
Benishangul Gumuz	19	40	67	57	67	53	43	62	21	2
SNNP	20	11	35	40	41	39	42	58	18	65

Gambella	28	11	50	32	65	66	22	66	6	3
Harari	32	16	37	47	47	37	63	79	53	1
Addis Ababa	8	0	19	8	36	51	84	86	85	14
Dire Dawa	48	26	67	19	44	22	74	78	78	2
Urban/rural										
Urban	16	15	43	23	52	32	56	64	46	101
Rural	28	22	55	33	56	55	38	65	15	180
Total	24	19	51	29	54	46	45	65	26	281

Note: See chapter 6 (Table 6.1) for information on proportion of all facilities offering antenatal care services

¹ At least one interviewed provider of ANC services reports receiving in-service training on malaria in pregnancy during the 24 months preceding the survey. The training must have involved structured sessions; it does not include individual instruction that a provider might have received during routine supervision.

² Facility reports that it distributes insecticide-treated mosquito bed nets (ITNs) to ANC clients, and it had ITNs in storage in the facility on the day of the survey.

³ Country-recommended artemisinin combination therapy (ACT) drug for treatment of active malaria: Artemeter-Lumefrantrine (ALU, Coartem)

⁴ Facility had unexpired malaria rapid diagnostic test (RDT) kits available somewhere in the facility.

⁵ Facility had a functioning microscope with glass slides and relevant stains for malaria microscopy available somewhere in the facility.

⁶ Facility has capacity to conduct hemoglobin test using any of the following means: hematology analyzer, hemoglobinometer or colorimeter, HemoCue, or litmus paper.

Table 3.16 Malaria services in health posts offering antenatal care services

Among **all health posts** offering antenatal care (ANC) services, the percentages having indicated items for the provision of malaria services available on the day of the survey, by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Percentage of health posts offering antenatal care services that have:			Medicines		Diagnostics		Number of health posts offering ANC
	Trained staff ¹	ITN ²	ACT ³	Quinine	Iron, folic acid or combined tablet	Malaria RDT ⁴		
Facility type								
Health Post	33	27	52	2	43	54	736	
Managing authority								
Government/public	33	27	52	2	43	54	736	
Region								
Tigray	35	26	87	4	70	96	30	
Afar	44	22	56	22	50	89	8	
Amhara	45	35	68	0	48	71	161	
Oromia	35	25	30	0	45	38	288	
Somali	21	7	50	7	29	43	22	
Benishangul Gumuz	18	79	93	21	68	82	17	
SNNP	24	21	61	3	32	55	205	
Gambella	25	31	44	6	38	75	3	
Harari	45	80	25	0	40	40	1	
Dire Dawa	19	32	94	3	29	71	2	
Urban/rural								
Urban	0	35	56	29	37	56	20	
Rural	34	27	51	1	43	54	716	
Total	33	27	52	2	43	54	736	

Note: See chapter 6 (Table 6.1) for information on proportion of all facilities offering antenatal care services

¹ At least one interviewed provider of ANC services reports receiving in-service training on malaria in pregnancy during the 24 months preceding the survey. The training must have involved structured sessions; it does not include individual instruction that a provider might have received during routine supervision.

² Facility reports that it distributes insecticide-treated mosquito bed nets (ITNs) to ANC clients, and it had ITNs in storage in the facility on the day of the survey.

³ Country-recommended artemisinin combination therapy (ACT) drug for treatment of active malaria: Artemeter-Lumefrantrine (ALU, Coartem)

⁴ Facility had unexpired malaria rapid diagnostic test (RDT) kits available somewhere in the facility.

3.6 Delivery and Newborn Care Services

Tables 3.17 and 3.18 provide information on the availability of maternal health services and on providers of delivery and newborn care services

Normal delivery services are available in about two-thirds (65 percent) of all health facilities excluding health posts. These services are exclusively available only in health centres (99 percent) and primary hospitals (98 percent), a little less available in general hospitals (93 percent) and referral hospitals (88 percent). However, less than half of the remaining health facilities offer normal delivery services (medium clinic 38 percent, higher clinic 30 percent and lower clinic 24 percent). These services are exclusively available at government facilities. Furthermore, NGO facilities (69 percent) are more likely to offer normal delivery services than private for profit, or other governmental facilities (27 percent and 3 percent, respectively). Forty five percent of health posts offer normal delivery services.

As expected, only a small proportion of facilities (3 percent) provide Caesarean delivery services. Caesarean delivery services are available mainly in hospitals (84 percent of referral hospitals, 86 percent of general hospitals, and 77 percent of primary hospitals).

Nine of ten facilities that offer normal delivery services reported that they have a provider of delivery care available on-site or on-call 24 hours a day. However, when a duty schedule is also assessed, only 57 percent of facilities that offer delivery services meet all criteria. Hospitals and health centres are more likely than all type of clinics to have providers on-site or on-call, and also more likely to have a 24-hour duty schedule. About half of health posts that offer normal delivery services reported that they have a provider of delivery care available on-site or on-call 24 hours a day. However, when a duty schedule is also assessed, only 14 percent of health posts that offer delivery services meet all criteria.

Table 3.17 Availability of maternal health services

Among all facilities excluding health posts, the percentages offering specific maternity services and the full range of maternity services and, among facilities that offer normal delivery services, the percentages having a skilled provider available on-site or on-call 24 hours a day to conduct deliveries, with or without an observed duty schedule, by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Percentage of facilities offering:					Number of facilities	Percentage of facilities offering normal delivery services that have:		Number of facilities offering normal delivery services
	Antenatal care (ANC)	Normal delivery service	Cesarean delivery	ANC and normal delivery service	ANC, normal delivery, and cesarean delivery		Provider of delivery care available on-site or on-call 24 hours/day, with observed duty schedule	Provider of delivery care available on-site or on-call 24 hours/day, with or without observed duty schedule	
Facility type									
Referral Hospital	91	88	84	88	84	2	82	382	2

General Hospital	94	93	86	92	85	7	79	391	7
Primary Hospital	94	98	77	94	75	3	73	373	3
Health Center	99	99	1	99	1	182	64	285	180
Higher Clinic	55	30	0	26	0	13	36	219	4
Medium Clinic	55	38	0	34	0	37	32	215	14
Lower Clinic	52	24	0	21	0	119	18	251	28
Managing authority									
Government/public	99	99	5	98	5	190	64	289	187
Other governmental (military, prison, federal police)	59	3	3	3	3	2	100	400	0
Private for profit	53	27	2	24	2	163	26	244	45
NGO (mission/faith-based, nonprofit)	80	69	6	69	6	8	46	283	5
Region									
Tigray	82	71	6	70	6	22	54	300	15
Afar	84	75	5	75	5	5	21	275	4
Amhara	89	71	2	71	2	87	40	281	62
Oromia	76	69	2	69	2	116	71	291	80
Somali	91	90	5	87	5	8	29	230	7
Benishangul Gumuz	66	57	3	57	3	4	50	272	2
SNNP	81	66	4	62	4	80	59	267	53
Gambella	42	27	1	24	1	6	29	185	2
Harari	54	37	11	37	11	2	100	331	1
Addis Ababa	45	35	6	31	6	31	66	279	11
Dire Dawa	54	48	8	46	8	3	63	300	1
Urban/rural									
Urban	68	53	6	50	6	149	54	272	79
Rural	84	74	1	74	1	214	58	285	158
Total	77	65	3	64	3	363	57	280	237

Table 3.18 Availability of maternal health services at health posts

Among health posts, the percentages offering specific maternity services and the full range of maternity services expected at the health post level and, among health posts that offer normal delivery services, the percentages having a skilled provider available on-site or on-call 24 hours a day to conduct deliveries, with or without an observed duty schedule, by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Percentage of health posts offering:			Number of facilities	Percentage of facilities offering normal delivery services that have:		
	Antenatal care (ANC)	Normal delivery service	ANC and normal delivery service		Provider of delivery care available on-site or on-call 24 hours/day, with observed duty schedule	Provider of delivery care available on-site or on-call 24 hours/day, with or without observed duty schedule	Number of health posts offering normal delivery services
Facility type							
Health Post	92	45	45	802	14	156	358
Managing authority							
Government/public	92	45	45	800	14	156	358
Other governmental (military, prison, federal police)	0	0	0	2	-	-	0
Region							

Tigray	92	60	60	33	40	280	20
Afar	82	55	55	10	8	150	5
Amhara	89	66	66	182	13	157	120
Oromia	91	23	23	316	20	180	72
Somali	70	10	10	31	0	150	3
Benishangul Gumuz	97	66	66	17	0	237	11
SNNP	100	61	61	205	9	117	124
Gambella	59	22	22	4	0	100	1
Harari	95	33	33	1	0	86	0
Dire Dawa	100	94	94	2	0	21	2
Urban/rural							
Urban	78	44	44	26	0	16	11
Rural	92	45	45	776	14	161	347
Total	92	45	45	802	14	156	358

Emergency Obstetric Care

During this assessment, on one hand providers were asked about availability of antibiotics, oxytocics, and anticonvulsant in the facilities on the day of the survey but at the other hand their usage in regard to emergency obstetric care. Providers were asked to report on any signal functions carried out in regard to these services.

Table 3.19 provides information on among facilities offering normal delivery services excluding health posts, the percentages reporting that they performed the signal functions for emergency obstetric care at least once during the three months before the survey.

In general, providers reported administering more parenteral oxytocic (76 percent) and antibiotics (63 percent) than anticonvulsant (20 percent). Parenteral oxytocic and antibiotics were almost universally available in hospitals regardless of type and universally available in other governmental facilities.

Overall (1) assisted vaginal delivery was the most frequent signal function carried out (83 percent) in almost all hospitals and health centres. (2) Manual removal of placenta, (3) removal of retained products of conception (MVA) and (4) neonatal resuscitation were carried out in seven of every ten health facilities offering normal delivery (68 percent, 67 percent and 68 percent, respectively), more likely in hospitals and health centres than in clinics. (5) Blood transfusion and (6) Caesarean delivery were the least performed with 4 percent and 5 percent respectively.

Table 3.19 Signal functions for emergency obstetric care

Among facilities excluding health posts offering normal delivery services, percentages reporting that they performed the signal functions for emergency obstetric care at least once during the three months before the survey, by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Percentage of facilities that applied parenteral:				Percentage of facilities that carried out:					Number of facilities offering normal delivery services
	Antibiotics	Oxytocic	Anticonvulsant	Assisted vaginal delivery	Manual removal of placenta	Removal of retained products of conception (MVA)	Neonatal resuscitation	Blood transfusion	Cesarean delivery	
Facility type										
Referral Hospital	96	96	96	96	89	86	96	96	96	2
General Hospital	98	100	88	99	91	84	98	82	92	7
Primary Hospital	92	96	80	98	86	88	94	57	73	3
Health Center	66	86	20	92	76	75	80	0	1	180
Higher Clinic	32	34	2	31	23	31	23	4	0	4
Medium Clinic	49	33	0	42	35	29	24	0	0	14
Lower Clinic	39	31	4	48	27	33	6	0	0	28
Managing authority										
Government/public	67	87	23	93	77	76	81	3	4	187
Other governmental (military, prison, federal police)	100	100	100	100	100	100	100	100	100	0
Private for profit	44	33	7	43	29	32	14	5	6	45
NGO (mission/faith-based, nonprofit)	59	67	9	91	63	59	65	8	9	5
Region										
Tigray	73	90	34	94	76	79	80	6	8	15
Afar	53	56	26	73	55	50	33	5	7	4
Amhara	54	71	23	74	64	68	59	2	2	62
Oromia	76	85	21	95	77	75	83	3	3	80
Somali	77	81	35	84	62	61	73	8	5	7
Benishangul Gumuz	50	67	28	89	73	89	78	5	5	2
SNNP	46	66	6	77	60	52	55	2	4	53
Gambella	54	49	3	89	71	77	66	3	3	2
Harari	77	100	23	100	38	77	62	23	31	1
Addis Ababa	79	73	28	66	54	59	56	15	18	11
Dire Dawa	54	88	25	79	58	67	67	17	17	1
Urban/rural										
Urban	67	71	37	80	66	66	60	10	12	79
Rural	60	79	11	85	68	68	72	0	1	158
Total	63	76	20	83	68	67	68	4	5	237

Note: MVA = manual vacuum aspiration

3.7 HIV and AIDS

Given the high prevalence of HIV/AIDS in Sub-Saharan Africa, several initiatives have been implemented to ensure appropriate prevention of new HIV infections and to treat people already living with HIV and AIDS. The 2014 ESPA+ collected information on various aspects of facilities' preparedness to provide quality HIV and AIDS services to the people of Ethiopia, including HIV testing and counselling, HIV and AIDS care and support services, and antiretroviral therapy (ART) services. Some of the findings are presented in Table 3.20.

HIV Testing and Counselling

A facility has an HIV testing system if the facility (1) reports conducting HIV testing in the facility or (2) reports testing done at an external testing site and has an agreement with that external site that test results will be returned to the facility. Overall, about three in ten of all health facilities in Ethiopia have a testing system, including nearly all hospitals (96 to 100 percent) and health centres (94 percent). About three-quarters (72 percent) of higher clinic, four in ten (45 percent) medium clinics and 14 percent of health posts also have HIV testing systems. Three of every ten government, and two in ten private facilities have a testing system.

Table 3.20 Availability of HIV testing and counseling services

Among all facilities, the percentages that report having an HIV testing system and, among facilities with an HIV testing system, the percentages that have HIV testing capacity at the facility and other items to support the provision of quality HIV testing and counseling services, by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Percentage of all facilities with HIV testing system ¹	Number of facilities	Percentage of facilities with HIV testing system that have:							Number of facilities having HIV testing system
			HIV testing capacity ²	HIV testing and counselling guidelines	Trained provider ³	Visual and auditory privacy ⁴	Client record ⁵	Condoms ⁶	Access to HIV PEP ⁷	
Facility type										
Referral Hospital	100	2	100	56	78	94	66	75	91	2
General Hospital	98	7	100	60	84	98	65	64	79	7
Primary Hospital	96	3	100	60	76	98	54	72	82	3
Health Centre	94	182	100	23	43	95	51	76	33	171
Health Post	14	802	90	34	30	88	50	85	0	109
Higher Clinic	72	13	96	36	50	99	70	64	12	10
Medium Clinic	45	37	100	23	59	94	51	50	3	17
Lower Clinic	6	119	100	1	36	84	26	73	0	7
Managing authority										
Government/ public	29	990	96	28	39	93	51	80	22	288
Other governmental (military, prison, federal police)	53	4	100	9	77	100	100	94	6	2
Private for profit	19	163	99	26	55	93	48	59	8	31
NGO (mission/ faith-based, nonprofit)	58	8	100	21	43	100	59	33	32	5
Region										
Tigray	69	54	100	42	47	100	52	83	23	37
Afar	50	14	100	5	44	94	29	49	14	7

Amhara	29	269	86	40	56	88	37	91	22	77
Oromia	24	432	100	29	37	87	63	78	19	102
Somali	19	39	100	9	38	99	25	54	13	7
Benishangul Gumuz	13	21	100	31	96	100	79	88	29	3
SNNP	25	285	100	8	17	100	47	65	18	71
Gambella	13	10	100	31	41	100	62	73	25	1
Harari	45	3	100	28	60	100	52	48	24	1
Addis Ababa	45	31	97	37	67	98	68	72	33	14
Dire Dawa	70	5	100	35	82	96	61	65	32	3
Urban/rural										
Urban	49	176	100	34	57	94	59	74	43	86
Rural	24	989	96	26	35	92	48	78	13	239
Total	28	1,165	97	28	41	93	51	77	21	325

Note: The guidelines and trained staff indicators presented in this table correspond to the staff and training domain for assessing readiness to provide HIV testing and testing services within the health facility assessment methodology proposed by WHO and USAID (2012). Similarly the visual and auditory privacy items comprise the equipment domain, the HIV testing capacity comprises the diagnostic domain, and condoms comprise the medicines and commodities domain for assessing readiness to provide HIV testing and counselling services within the WHO-USAID framework.

¹ Facility reports conducting HIV testing in the facility or else in an external testing site and having an agreement with that external site that test results will be returned to the facility.

² Facility reports conducting HIV testing in the facility and had HIV rapid diagnostic test kits or ELISA testing capacity or dynabeads testing capacity or western blot testing capacity observed in the facility.

³ Facility had at least one interviewed staff member providing HIV testing services who reported receiving in-service training in some aspect of HIV/AIDS testing and counselling during the 24 months preceding the survey. The training must have involved structured sessions; it does not include individual instruction that a provider might have received during routine supervision.

⁴ Private room or screened-off space available in HIV testing and counselling area that is a sufficient distance from sites where providers and/or other clients may be so that a normal conversation could not be overheard, and the client could not be observed by others.

⁵ Individual client chart/record or card maintained in the facility for those who receive services refers to any system where individual information about the client is recorded, so that a record of all care and services provided is available in one document.

⁶ Condoms available at the HIV testing and counselling site on the day of the survey.

⁷ Staff working in the facility have access to HIV post-exposure prophylaxis, i.e. PEP.

Among facilities that have an HIV testing system, all had the capacity to test for HIV on the day of the survey (i.e., the facility had an HIV rapid test kit, ELISA testing capacity, or other HIV testing capacity on the day of the survey). However, HIV testing and counselling guidelines is limited to some facilities; HIV testing and counselling guidelines were available in 28 percent of facilities having an HIV testing system.

3.8 Non-Communicable Diseases

According to WHO, non-communicable diseases are far the principal cause of death in the world (about 63 percent). And the majority of the death (80 percent) occurred in developing countries (WHO 2012). Also non-communicable diseases are becoming prevalent in Africa as well.

Table 3.21 presents information on the overall availability of non-communicable diseases services.

Services were deemed to be available when the providers in the facility diagnose, prescribe treatment for, or manage patients with each specific non-communicable disease. In general about three-quarters of all health facilities (excluding health posts) offer services for chronic respiratory diseases (76 percent) and services for cardiovascular diseases (73 percent). Widely available across all facility type

(ranging from 82 to 100 percent for cardiovascular disease and 88 to 100 percent for chronic respiratory diseases) except in lower clinics. While nearly all hospitals offer these two services only half of the lower clinics offer them. All other governmental facilities are more likely to provide services for cardiovascular diseases while government facilities are more likely to provide services for chronic respiratory diseases (88 percent).

Six of every ten health facilities excluding health posts offer services for diabetes and chronic renal diseases (59 percent respectively). All other governmental facilities offer these two services.

Services of mental illness and cancer diseases were the least frequent, available only in a third (32 percent) and less than a quarter (23 percent) respectively of all facilities excluding health posts. Government facilities are more likely to provide these two services (41 percent for mental illness and 29 percent for cancer diseases).

Table 3.21 Service availability for non-communicable diseases

Among all facilities excluding health posts, the percentages offering services for non-communicable diseases, by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Percentage of facilities offering services for NCD:						Number of facilities
	Percentage of facilities offering services for diabetes ¹	Percentage of facilities offering services for cardiovascular diseases ²	Percentage of facilities offering services for chronic respiratory diseases ³	Percentage of facilities offering services for cancer diseases ⁴	Percentage of facilities offering services for Mental illness Services ⁵	Percentage of facilities offering services for Chronic Renal Diseases ⁶	
Facility type							
Referral Hospital	97	97	97	69	91	97	2
General Hospital	97	95	96	66	75	91	7
Primary Hospital	98	100	100	65	87	96	3
Health Center	63	82	88	28	39	68	182
Higher Clinic	89	87	88	60	50	81	13
Medium Clinic	96	93	93	32	47	77	37
Lower Clinic	34	49	49	3	11	34	119
Managing authority							
Government/public	64	83	88	29	41	69	190
Other governmental (military, prison, federal police)	100	100	81	6	11	97	2
Private for profit	51	62	62	15	23	47	163
NGO (mission/faith-based, nonprofit)	77	61	65	19	24	53	8
Region							
Tigray	67	73	79	25	40	65	22
Afar	60	65	66	4	15	58	5
Amhara	64	74	77	24	40	64	87
Oromia	41	69	72	17	25	52	116
Somali	67	83	86	30	38	72	8
Benishangul Gumuz	44	71	80	14	34	60	4
SNNP	66	75	76	23	27	57	80
Gambella	18	42	54	2	13	31	6
Harari	97	94	94	63	66	94	2
Addis Ababa	88	84	84	36	46	73	31
Dire Dawa	90	90	90	62	70	80	3

Urban/rural

Urban	72	78	82	28	42	67	149
Rural	49	70	72	19	25	53	214
Total	59	73	76	23	32	59	363

¹ Providers in the facility diagnose, prescribe treatment for, or manage patients with diabetes.

² Providers in the facility diagnose, prescribe treatment for, or manage patients with cardiovascular diseases.

³ Providers in the facility diagnose, prescribe treatment for, or manage patients with respiratory disease.

⁴ Providers in the facility diagnose, prescribe treatment for, or manage patients with cancer.

⁵ Providers in the facility diagnose, prescribe treatment for, or manage patients with mental illness.

⁶ Providers in the facility diagnose, prescribe treatment for, or manage patients with renal disease.

3.9 Tuberculosis

According to WHO, tuberculosis (TB) remains a major public health issue worldwide. It's one the most deadly diseases due to a unique infectious agent coming second after HIV/AIDS. The 2014 ESPA collected information on various aspects of facilities' preparedness to provide quality TB services including diagnostic and/or treatment availability, laboratory diagnostic capacity, guidelines, trained staff and medicines. Some of the findings are presented in Tables 3.22 to 3.24.

Seven of every ten (69 percent) facilities excluding health posts offer any TB diagnosis, treatment and/or treatment follow-up services. These services are universally available at hospitals regardless of type, health centres and government facilities. Gambella region is the least to provide TB services. Three of every ten health posts (29 percent) offer any TB diagnosis, treatment and/or treatment follow-up services.

Among facilities that offer TB diagnosis, treatment and/or treatment follow-up services, only a small portion (44 percent) had guidelines for the diagnosis and treatment of TB available in the facility. Even fewer had guidelines for diagnostic and treatment of MDR-TB (18 percent) and management of HIV and TB co-infection (9 percent) available.

Less than a quarter (23 percent) of all facilities excluding health posts offer screening and referral for TB diagnosis. However 29 percent of health posts offer screening and referral for TB diagnosis.

Table 3.22 Availability of tuberculosis services, guidelines, and trained staff for tuberculosis services

Among all facilities excluding health posts, the percentages offering any tuberculosis (TB) diagnostic services or any treatment and/or treatment follow-up services and, among facilities offering any TB services, the percentages having TB guidelines and at least one staff member recently trained in TB services, by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Percentage of all facilities offering:				Number of facilities	Percentage of facilities offering any TB services that have guidelines for:					Number of facilities offering any TB diagnostic, treatment and/or treatment follow-up services
	Screening and referral for TB diagnosis ¹	Any TB diagnostic services ²	Any TB treatment and/or treatment follow-up services ³	Any TB diagnostic, treatment and/or treatment follow-up services ³		Diagnosis and treatment of TB	Diagnosis and treatment of MDR-TB	Management of HIV and TB co- infection	TB infection control	Trained staff ⁴	
Facility type											
Referral Hospital	38	97	84	97	2	77	55	0	35	81	2
General Hospital	33	97	85	98	7	68	35	7	24	79	7
Primary Hospital	40	98	92	98	3	69	45	8	22	76	3

Health Center	39	91	91	95	182	54	21	9	11	71	173
Higher Clinic	18	87	32	87	13	37	19	13	29	59	11
Medium Clinic	11	82	15	82	37	15	7	13	14	26	30
Lower Clinic	2	22	1	22	119	5	0	5	10	16	26
Managing authority											
Government/public	39	91	91	95	190	55	22	8	12	72	181
Other governmental (military, prison, federal police)	6	62	11	62	2	9	9	0	0	14	1
Private for profit	5	40	6	40	163	16	7	11	16	27	65
NGO (mission/faith-based, nonprofit)	27	63	42	63	8	36	23	2	4	73	5
Region											
Tigray	32	80	66	84	22	61	31	8	18	57	18
Afar	33	60	49	63	5	59	6	0	8	59	3
Amhara	14	63	52	66	87	58	24	11	19	72	58
Oromia	33	62	60	64	116	49	14	8	8	70	75
Somali	20	73	55	73	8	35	3	1	5	48	6
Benishangul Gumuz	6	44	47	51	4	69	25	13	3	72	2
SNNP	22	73	48	74	80	28	15	7	8	51	60
Gambella	6	15	12	16	6	25	10	19	19	63	1
Harari	14	91	46	91	2	44	25	9	16	53	2
Addis Ababa	20	84	22	84	31	26	20	15	20	31	26
Dire Dawa	26	82	64	82	3	61	22	5	20	73	2
Urban/rural											
Urban	19	70	39	70	149	45	23	8	19	53	105
Rural	26	66	60	69	214	44	15	10	8	65	147
Total	23	67	51	69	363	44	18	9	13	60	252

Note: The guidelines and trained staff indicators presented in this table comprise the staff and training domain for assessing readiness to provide TB services within the health facility assessment methodology proposed by WHO and USAID (2012).

Note: MDR-TB = multi-drug resistance tuberculosis

¹ Facility reports that it refers clients outside the facility for TB diagnosis, and there is documentation on the day of the survey visit to support the contention.

² Facility reports that providers in the facility make a diagnosis of TB by using any of the following methods: sputum smear only, X-ray only, either sputum or X-ray, both sputum and X-ray, based on clinical symptoms only, sputum culture, or molecular tests; or else the facility reports that they refer clients outside the facility for TB diagnosis, and a register was observed indicating clients who had been referred for TB diagnosis.

³ Facility reports that they follow one of the following TB treatment regimens or approaches:

- Directly observe for two months and follow up for four months
- Directly observe for six months
- Follow up clients only after the first two months of direct observation elsewhere
- Diagnose and treat clients while in the facility as inpatients, and then discharge elsewhere for follow-up
- Provide clients with the full treatment with no routine direct observation phase
- Diagnose, prescribe, or provide medicines with no follow-up

⁴ At least one interviewed provider of any one of the following TB services reported receiving in-service training relevant to the particular TB service during the 24 months preceding the survey: TB diagnosis and treatment; management of HIV and TB co-infection; MDR-TB treatment, identification of need for referral; or TB infection control. The training must have involved structured sessions; it does not include individual instruction that a provider might have received during routine supervision.

Table 3.23 Availability of tuberculosis services, guidelines, and trained staff for tuberculosis services at health post

Among all health posts, the percentages offering any tuberculosis (TB) diagnostic services or any treatment and/or treatment follow-up services and, among health posts offering any TB services, the percentages having TB guidelines and at least one staff member recently trained in TB services, by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Percentage of all health posts offering:			Number of facilities	Percentage of health posts offering any TB services that have guidelines for:		Number of health posts offering any TB diagnostic, treatment and/or treatment follow-up services
	Screening and referral for TB diagnosis ¹	Any TB diagnostic services ²	Any TB diagnostic, treatment and/or treatment follow-up services ³		TB infection control	Trained staff ⁴	
Facility type							
Health Post	29	29	29	802	3	65	233
Managing authority							
Government/public	29	29	29	800	3	65	233
Other governmental (military, prison, federal police)	0	0	0	2	-	-	0
Region							
Tigray	12	12	12	33	0	33	4
Afar	0	0	0	10	-	-	0
Amhara	34	34	34	182	0	58	62
Oromia	30	30	30	316	8	62	93
Somali	0	0	0	31	-	-	0
Benishangul Gumuz	7	7	7	17	0	100	1
SNNP	34	34	34	205	0	77	70
Gambella	4	4	4	4	0	100	0
Harari	29	29	29	1	0	83	0
Dire Dawa	45	45	45	2	14	21	1
Urban/rural							
Urban	28	28	28	26	0	99	7
Rural	29	29	29	776	3	64	225
Total	29	29	29	802	3	65	233

Note: The guidelines and trained staff indicators presented in this table comprise the staff and training domain for assessing readiness to provide TB services within the health facility assessment methodology proposed by WHO and USAID (2012).

¹ Facility reports that it refers clients outside the facility for TB diagnosis, and there is documentation on the day of the survey visit to support the contention.

² Facility reports that providers in the facility make a diagnosis of TB by using any of the following methods: sputum smear only, X-ray only, either sputum or X-ray, both sputum and X-ray, based on clinical symptoms only, sputum culture, or molecular tests; or else the facility reports that they refer clients outside the facility for TB diagnosis, and a register was observed indicating clients who had been referred for TB diagnosis.

³ Facility reports that they follow one of the following TB treatment regimens or approaches:

- Directly observe for two months and follow up for four months
- Directly observe for six months
- Follow up clients only after the first two months of direct observation elsewhere
- Diagnose and treat clients while in the facility as inpatients, and then discharge elsewhere for follow-up
- Provide clients with the full treatment with no routine direct observation phase
- Diagnose, prescribe, or provide medicines with no follow-up

⁴ At least one interviewed provider of any one of the following TB services reported receiving in-service training relevant to the particular TB service during the 24 months preceding the survey: TB diagnosis and treatment; management of HIV and TB co-infection; MDR-TB treatment, identification of need for referral; or TB infection control. The training must have involved structured sessions; it does not include individual instruction that a provider might have received during routine supervision.

In general, on one hand six of every ten (59 percent) facilities excluding health posts offering any TB services made the diagnostic of pulmonary TB based on sputum smear only. All other governmental facilities made the diagnostic of pulmonary TB based on sputum smear only. Health centres and medium clinics were most likely to make the diagnostic of pulmonary TB based on sputum smear only (67 percent and 71 percent respectively).

On the other hand, only seven percent of all facilities excluding health posts offering any TB services made the diagnostic of pulmonary TB based on both sputum and x-ray. Referral hospitals and private-managed facilities were most likely to make the diagnostic of pulmonary TB based on both sputum and x-ray (68 percent and 14 percent respectively).

Less than a quarter (23 percent) of all facilities excluding health posts offering any TB services made the diagnostic of pulmonary TB based on clinical symptoms only. All lower clinic (92 percent) made the diagnostic of pulmonary TB based on clinical symptoms only, compared with less than twenty percent.

Table 3.24 The most common method used for diagnosing pulmonary TB

Among all facilities excluding health posts offering any TB services, the percentages of the most common methods used by providers of the facilities for diagnosing pulmonary TB, by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Sputum smear only	X-ray only	Either sputum or x-ray	Both sputum and x-ray	Clinical symptoms only	Number of facilities offering any TB diagnostic, treatment and/or treatment follow-up services
Facility type						
Referral Hospital	23	0	26	68	0	2
General Hospital	33	3	42	50	1	7
Primary Hospital	51	2	55	43	2	3
Health Center	67	0	67	2	17	173
Higher Clinic	55	1	58	42	0	11
Medium Clinic	71	0	71	8	19	30
Lower Clinic	7	0	7	0	92	26
Managing authority						
Government/public	65	0	66	4	17	181
Other governmental (military, prison, federal police)	95	0	95	5	0	1
Private for profit	42	0	43	14	41	65
NGO (mission/faith-based, nonprofit)	45	0	45	7	47	5
Region						
Tigray	73	0	76	8	7	18
Afar	58	0	60	16	17	3
Amhara	62	0	63	7	23	58
Oromia	59	0	59	2	16	75
Somali	62	0	63	6	31	6
Benishangul Gumuz	75	0	75	6	0	2
SNNP	51	0	53	2	41	60
Gambella	66	0	66	6	19	1
Harari	69	3	72	16	13	2
Addis Ababa	58	0	59	23	17	26
Dire Dawa	56	0	56	27	17	2
Urban/rural						

Urban	66	0	67	14	16	105
Rural	54	0	55	2	29	147
Total	59	0	60	7	23	252

3.10 Malaria

Tables 3.25 and 3.26 provide an overview of the availability of malaria services. In addition, the tables provide information on the availability of service guidelines, recently trained staff, and diagnostic capacity. Malaria diagnosis and/or treatment services are universally available in Ethiopian health facilities (94 percent); however, only eight in ten health posts offer malaria services (77 percent).

Table 3.25 Availability of malaria services and availability of guidelines, trained staff, and diagnostic capacity in facilities offering malaria services

Among all facilities excluding health posts, the percentages offering malaria diagnosis and/or treatment services and, among facilities offering malaria diagnosis and/or treatment services, the percentages that have guidelines, trained staff, and diagnostic capacity to support the provision of quality service for malaria, by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Percentage of all facilities offering malaria diagnosis and/or treatment services ¹	Number of facilities	Guidelines	Trained staff	Diagnostics			Number of facilities offering malaria diagnosis and/or treatment services
			Guidelines for diagnosis and/or treatment of malaria	Staff trained in malaria diagnosis and/or treatment ²	Malaria RDT ⁴	Malaria microscopy ⁵	Any malaria diagnostics ⁶	
Facility type								
Referral Hospital	100	2	22	44	9	78	78	2
General Hospital	99	7	32	55	32	80	85	7
Primary Hospital	100	3	56	58	33	85	88	3
Health Center	97	182	48	67	67	55	85	176
Higher Clinic	96	13	27	36	42	85	85	13
Medium Clinic	98	37	30	18	29	63	73	36
Lower Clinic	87	119	13	7	5	1	7	103
Managing authority								
Government/public	97	190	47	67	65	56	85	184
Other governmental (military, prison, federal police)	100	2	53	22	67	28	78	2
Private for profit	90	163	17	11	14	23	28	147
NGO (mission/faith-based, nonprofit)	94	8	43	37	13	42	53	7
Region								
Tigray	97	22	59	48	58	65	78	21
Afar	100	5	34	59	80	53	92	5
Amhara	93	87	39	44	36	35	54	81
Oromia	90	116	33	50	44	37	59	104
Somali	98	8	10	40	71	42	81	8
Benishangul Gumuz	94	4	41	45	37	39	52	3
SNNP	98	80	31	35	34	37	51	78
Gambella	97	6	24	26	44	16	48	6
Harari	100	2	40	46	26	63	71	2
Addis Ababa	94	31	23	17	49	70	81	29
Dire Dawa	92	3	48	80	20	67	72	3
Urban/rural								
Urban	91	149	30	37	31	52	61	137
Rural	95	214	37	45	49	34	59	203

Total	94	363	34	42	42	41	60	340
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Note: The indicators presented in this table comprise the staff and training and diagnostic domains for assessing readiness to provide services for malaria within the health facility assessment methodology proposed by WHO and USAID (2012).

¹ This is based on facilities self-reporting that they offer malaria diagnosis and/or treatment services. Facilities offering curative care for sick children where providers of sick child services were found on the day of the survey to be making diagnosis of malaria or offering treatment for malaria were counted as offering malaria diagnosis and/or treatment services.

² Facility has at least one interviewed provider of malaria services who reports receiving in-service training on malaria diagnosis and/or treatment during the 24 months preceding the survey. The training must have involved structured sessions; it does not include individual instruction that a provider might have received during routine supervision.

⁴ Facility had unexpired malaria rapid diagnostic test kit available somewhere in the facility.

⁵ Facility had a functioning microscope with glass slides and relevant stains for malaria microscopy available somewhere in the facility.

⁶ Facility had either malaria RDT capacity or malaria microscopy capacity.

Table 3.26 Availability of malaria services and availability of guidelines, trained staff, and diagnostic capacity in health posts offering malaria services

Among all health posts, the percentages offering malaria diagnosis and/or treatment services and, among health posts offering malaria diagnosis and/or treatment services, the percentages that have guidelines, trained staff, and diagnostic capacity to support the provision of quality service for malaria, by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Percentage of all health posts offering malaria diagnosis and/or treatment services ¹	Number of health posts	Guidelines	Trained staff	Diagnostics	Number of health posts offering malaria diagnosis and/or treatment services
			Guidelines for diagnosis and/or treatment of malaria	Staff trained in malaria diagnosis and/or treatment ²	Malaria RDT ⁴	
Facility type						
Health Post	77	802	45	66	69	617
Managing authority						
Government/public	77	800	45	66	69	616
Other governmental (military, prison, federal police)	100	2	0	0	0	2
Region						
Tigray	100	33	48	68	96	33
Afar	100	10	23	50	82	10
Amhara	94	182	52	76	76	172
Oromia	59	316	38	69	62	187
Somali	95	31	0	26	37	30
Benishangul Gumuz	100	17	14	66	79	17
SNNP	79	205	60	60	70	162
Gambella	96	4	23	69	65	4
Harari	95	1	25	70	40	1
Dire Dawa	100	2	35	61	71	2
Urban/rural						
Urban	80	26	88	10	56	21
Rural	77	776	44	68	70	596
Total	77	802	45	66	69	617

Note: The indicators presented in this table comprise the staff and training and diagnostic domains for assessing readiness to provide services for malaria within the health facility assessment methodology proposed by WHO and USAID (2012).

¹ This is based on facilities self-reporting that they offer malaria diagnosis and/or treatment services. Facilities offering curative care for sick children where providers of sick child services were found on the day of the survey to be making diagnosis of malaria or offering treatment for malaria were counted as offering malaria diagnosis and/or treatment services.

² Facility has at least one interviewed provider of malaria services who reports receiving in-service training on malaria diagnosis and/or treatment during the 24 months preceding the survey. The training must have involved structured sessions; it does not include individual instruction that a provider might have received during routine supervision.

⁴ Facility had unexpired malaria rapid diagnostic test kit available somewhere in the facility.

Among facilities that offer malaria diagnosis and/or treatment services, only one-third (34 percent) and less than half health posts (45 percent) had guidelines for the diagnosis and treatment of malaria available in the facility. Capacity to confirm a malaria infection is not universally available in facilities that offer malaria diagnosis and/or treatment services. Sixty percent of these facilities and sixty nine health posts had malaria diagnostic capacity (i.e., the facility had a functioning microscope with glass slides and relevant stains for malaria microscopy available somewhere in the facility, or else an unexpired malaria rapid diagnostic test kit available somewhere in the facility). As shown in the table, malaria microscopy capacity and malaria rapid diagnostic test capacity were the same (41 percent and 42 percent, respectively) among facilities except health posts that offer malaria diagnosis and/or treatment services. However, health centres were more likely to have malaria rapid diagnostic test available (67 percent). Malaria microscopy capacity was more available in hospitals regardless of type and higher clinic, ranging from 78 percent to 85 percent.

3.11 Neglected Tropical Disease (NTD)

Services were deemed to be available when the providers in the facility diagnose, prescribe treatment, or manage patients with each specific neglected tropical disease (NTDs). In general about more than half of the health facilities excluding health posts offer services for both soil transmitted helminthes (64 percent), and services for trachoma (60 percent). Among all hospitals, nearly about nine of every ten facilities have services for soil transmitted helminthes, and trachoma.

Over all, about four of every ten health facilities excluding health posts offer services for schistosomiasis, and the availability of services for onchocerciasis, leishmaniasis, and lymphatic filariases are 27 percent, 25 percent, and 24 percent respectively. Services of Dracunculosis (16 percent), and podoconiosis (12 percent) were the least frequently available services in health facilities excluding health posts.

Table 3.27 Service availability for neglected tropical diseases

Among all facilities, excluding health posts, the percentages offering services for neglected tropical diseases, by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Percentage of facilities offering services for neglected tropical diseases:								Number of facilities
	Onchocerciasis ¹	Lymphatic filariases ²	Schistosomiasis ³	Soil transmitted helminthes ⁴	Trachoma ⁵	Dracunculiasis ⁶	Podoconiosis ⁷	Leishmaniasis ⁸	
Facility type									
Referral									
Hospital	63	72	84	91	84	53	53	81	2
General									
Hospital	61	61	79	88	79	44	44	68	7
Primary									
Hospital	56	54	87	92	88	40	40	60	3
Health Center	35	29	48	75	74	22	14	31	182
Higher Clinic	39	39	64	75	69	28	20	44	13
Medium									
Clinic	32	34	61	78	72	17	16	26	37
Lower Clinic	8	9	12	39	32	3	2	9	119
Managing authority									
Government/	36	31	49	76	75	23	16	33	190

public									
Other governmental (military, prison, federal police)	8	6	11	50	94	6	6	6	2
Private for profit	16	18	28	51	43	9	8	16	163
NGO (mission/faith-based, nonprofit)	41	24	40	70	58	15	4	35	8
Region									
Tigray	30	31	57	68	66	22	20	35	22
Afar	8	6	20	52	24	2	2	5	5
Amhara	23	18	46	72	71	11	10	30	87
Oromia	32	31	39	59	58	22	12	25	116
Somali	25	16	28	51	48	25	10	31	8
Benishangul Gumuz	60	46	51	57	60	37	39	43	4
SNNP	20	18	24	66	54	9	7	16	80
Gambella	5	3	3	8	6	6	0	2	6
Harari	54	49	83	89	77	40	29	57	2
Addis Ababa	31	29	52	70	63	19	17	27	31
Dire Dawa	68	68	78	80	82	56	38	64	3
Urban/rural									
Urban	26	27	45	67	59	17	13	26	149
Rural	27	23	35	62	61	16	11	24	214
Total	27	24	39	64	60	16	12	25	363

¹ Providers in the facility diagnose, prescribe treatment for, or manage patients with onchocerciasis.

² Providers in the facility diagnose, prescribe treatment for, or manage patients with lymphatic filariasis.

³ Providers in the facility diagnose, prescribe treatment for, or manage patients with schistosomiasis.

⁴ Providers in the facility diagnose, prescribe treatment for, or manage patients with soil transmitted helminthes.

⁵ Providers in the facility diagnose, prescribe treatment for, or manage patients with trachoma.

⁶ Providers in the facility diagnose, prescribe treatment for, or manage patients with dracunculiasis.

⁷ Providers in the facility diagnose, prescribe treatment for, or manage patients with podoconiosis.

⁸ Providers in the facility diagnose, prescribe treatment for, or manage patients with leishmaniasis.

In general, Services for all neglected tropical disease (NTDs) are more likely available in hospitals compared with other facility types, and Government facilities are more likely to provide these services compared with other managing authorities. In Gambella and Afar regions, the availability of services for NTD is less likely available than other regions. However, even though Gambella region is among the regions with high NTD burden, the availability of NTD service is lesser (less than 8 percent for all NTD disease) in this region compared with all other regions. Table 12.1 provides details on the availability of services and additional information that describes the specific services available, by facility type, managing authority and regions.

3.12 Health providers' clinical knowledge and staff attendance

Assessment of clinical knowledge was done based on case simulations (clinical vignettes) for four selected health conditions. In the current ESPA+, the objective of this provider knowledge subsection is to broadly assess the quality of health service delivery in the selected health facilities. The health conditions were selected based on their relevance to the overall disease burden including maternal and

child health issues. Providers who are working in the health posts were excluded because their primary role is on preventive aspects rather than providing curative services. The four case simulations included in the clinical knowledge assessment section are pulmonary TB (PTB), malaria (with and without anaemia), post-partum haemorrhage (PPH), and birth asphyxia. Each case simulation was presented to the selected health provider for interview.

To assess provider's attendance, two visits were made to each health facility. The first visit was announced where the staff at the sampled facility were aware of the interviewers' visit. The second visit was unannounced and focused only on staff attendance while the staff was in their regular schedules. There was at least one day gap between the first and the second visits. On the day of the unannounced visit, enumerators checked the availability of selected staff and coded the reasons if the staff members were not present.

Diagnostic accuracy

A total of 4,807 health providers responded to the clinical knowledge section of health workers questionnaire. Of the total 4,859 eligible respondents 4,807 (98.9 percent) of them participated in the clinical knowledge assessment. The numbers provided in the Table are weighted and the weighted equivalent of 4,807 is 3,492. Out of whom, 5 percent were general practitioners or medical specialists; 12 percent were health officers or integrated emergency surgical officers (IESO); 10 percent were BSc nurses or midwives; and the majority (73 percent) were diploma nurses or midwives.

In general, diagnostic accuracy for PTB is 86 percent, for PPH (71 percent), for birth asphyxia (56 percent), and for malaria (71 percent). The overall diagnostic accuracy, i.e. the average of the four disease conditions is 71 percent.

Table 3.28 Diagnostic accuracy

Diagnostic accuracy by background characteristics, Ethiopia SPA 2014+

Background characteristics	Percentage of health care providers responding accurate diagnosis for the given case scenario:						Average of:		Number of health workers
	TB	Malaria with anemia	Malaria	Malaria with anemia or malaria	PPH	Asphyxia	Average of 4 conditions: TB, malaria with anemia, PPH and asphyxia	Average of 4 conditions: TB, malaria with anemia or malaria, PPH and asphyxia	
Facility type									
Referral Hospital	90	8	54	61	75	63	59	72	147
General Hospital	86	7	63	69	77	56	56	72	391
Primary Hospital	88	10	65	74	79	57	59	74	120
Health Center	85	6	67	72	72	58	55	72	2,314
Higher Clinic	89	8	52	57	64	57	55	67	84
Medium Clinic	92	3	67	69	66	50	53	69	164
Lower Clinic	83	3	72	76	52	45	46	64	272
Managing authority									
Government/ public	85	6	67	72	73	58	56	72	2,835

Other governmental (military, prison, federal police)	95	4	83	87	64	34	49	70	15
Private for profit	88	4	63	67	61	51	51	67	567
NGO (mission/ faith-based, nonprofit)	83	5	77	81	70	45	51	70	75
Region									
Tigray	81	6	63	67	73	62	55	71	291
Afar	87	8	74	81	63	45	51	69	42
Amhara	83	7	70	74	76	64	57	74	709
Oromia	88	5	70	73	72	56	55	72	1,042
Somali	87	8	64	71	75	39	52	68	111
Benishangul Gumuz	95	6	82	87	64	47	53	73	47
SNNP	86	7	72	78	62	50	51	69	726
Gambella	95	2	83	84	58	46	51	71	31
Harari	90	11	53	64	74	61	59	72	19
Addis Ababa	85	5	44	48	74	59	56	66	439
Dire Dawa	82	4	58	62	76	53	54	68	35
Urban/rural									
Urban	86	7	62	67	71	57	55	70	1,652
Rural	85	5	70	75	71	55	54	72	1,840
Provider category									
Medical specialist ¹	89	13	44	56	74	68	61	72	55
General Practitioner	94	10	64	72	93	76	68	84	134
Health officer / IESO	88	9	68	76	85	71	63	80	413
Nurse(BSc)	85	7	66	72	74	50	54	70	289
Nurse(Diploma)	84	5	67	71	63	52	51	68	1,926
Specialized Nurse ²	90	9	64	73	67	51	54	70	115
Midwife (BSC)	79	4	55	58	92	60	59	72	44
Midwife (Diploma)	86	5	65	68	82	57	57	73	516
Total	86	6	66	71	71	56	55	71	3,492

¹ MD specialist includes General Surgeon, Anesthesiologist, Obstetrician and gynecologist, Internist, Pediatrician, psychiatrist, Radiologist, and other Service Specialist.

² includes neonatology nurse, ophthalmic nurse, nurse anesthetist, public health nurse etc...

Absenteeism rate

Staff absenteeism was calculated based on randomly selecting at most 10 staff per facility who were expected to be at the facility during the second visit. Staff who were not present because of duty rotation or working outside the facility (outreach or other) were considered as present.

A total of 3,383 providers were randomly selected for the second unannounced visit. Of these, 33 percent were absent regardless of the reason. Twenty three percent and 9 percent of health providers were absent from health facilities due to approved and unapproved reasons respectively. The approved reasons included that staff was absent due to: sickness or maternity (4 percent), training or seminar (7 percent), official mission (4 percent), and other approved reasons (8 percent). About one of ten providers were absent without approval.

Table 3.29 Reason for absent

Reason for being absent at the facility by background characteristics, Ethiopia SPA+ 2014

Background characteristics	Sick /	In training /	Reasons for being absent			Not	Other	Total percent	Total sample
			Official	Other	Total				

	maternity	seminar	mission	approved absence	approved absence	approved absence		absent	providers
Facility type									
Referral Hospital	1	3	2	4	11	4	0	15	15
General Hospital	2	3	1	7	12	2	0	14	60
Primary Hospital	3	7	2	8	19	2	0	21	23
Health Center	3	7	3	12	25	4	1	30	1,405
Health Post	5	9	5	4	23	16	1	40	1,483
Higher Clinic	1	1	3	4	9	1	2	11	66
Medium Clinic	2	3	5	4	14	2	0	16	116
Lower Clinic	3	2	6	13	23	8	2	33	214
Managing authority									
Government/ public	4	8	4	8	24	10	1	35	2,952
Other governmental (military, prison, federal police)	1	1	0	18	19	0	0	19	8
Private for profit	2	2	5	9	17	5	1	24	385
NGO (mission/ faith-based, nonprofit)	0	2	8	4	14	1	1	17	38
Region									
Tigray	2	11	3	8	24	3	1	28	205
Afar	2	10	4	6	22	18	0	40	44
Amhara	5	5	2	5	17	5	2	23	729
Oromia	3	11	5	8	27	9	0	37	1,248
Somali	7	5	0	9	21	2	0	23	100
Benishangul Gumuz	5	3	5	7	20	14	0	34	67
SNNP	6	3	6	9	25	16	1	42	792
Gambella	2	7	4	8	21	7	0	28	27
Harari	4	6	4	6	21	13	0	35	11
Addis Ababa	2	2	2	6	12	1	0	13	139
Dire Dawa	3	7	5	5	20	14	0	35	20
Urban/rural									
Urban	5	4	3	9	21	6	1	28	740
Rural	4	8	5	7	24	10	1	35	2,643
Provider category									
Medical specialist ²	0	1	3	8	12	7	0	19	41
General Practitioner	1	4	2	5	12	1	0	14	20
Health officer / IESO	4	6	7	7	24	1	1	26	145
BSc Nurse	4	4	5	21	34	1	0	35	67
Diploma Nurse	4	7	3	9	22	8	1	31	1,010
Specialized Nurse ³	3	7	0	12	22	5	1	28	72
BSC Midwife	5	2	0	18	25	1	0	27	21
Diploma Midwife	1	9	2	9	21	2	1	24	194
Pharmacy Professional ⁴	1	6	3	14	24	0	0	24	61
Med Lab Professional ⁵	4	6	6	12	27	2	1	30	433
Other Paramedics ⁶	0	0	0	4	4	0	0	4	1
Health Extension Worker	4	9	5	4	22	17	1	40	1,317
Total	4	7	4	8	23	9	1	33	3,383

¹ Includes health providers who were on a different shift or doing field work.

² MD specialist includes General Surgeon, Anesthesiologist, Obstetrician and gynecologist, Internist, Pediatrician, psychiatrist, Radiologist, and other Service Specialist.

³ includes neonatology nurse, ophthalmic nurse, anesthesia nurse, public health nurse etc...

⁴ Includes BSc or Diploma pharmacy

⁵ Includes MSC, BSc or diploma laboratory technicians and Microbiologists

⁶ includes environmental health, health informatics/information technician, biomedical engineer, radiology technician/technologist, physiotherapy professional and dietician

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