

ENHAT-CS – From emergency response to a Comprehensive Country – Owned System for HIV Care and Treatment 2011 – 2014

Management Sciences for Health

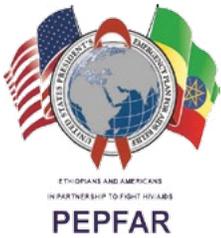
December 2014

Development objective: ENHAT-CS integrated comprehensive, quality HIV services into other health and social services, strengthened health centers to sustain these integrated services, and used strategic information for improved evidence-based decision making. Guided by the GOE mandate of service integration, ENHAT-CS strengthened the whole health system and promoted equitable access to services. Building on approaches proven by HCSP, ENHAT-CS was characterized by: strong partnership with the GOE for task shifting, service integration, and quality assurance; a gender sensitive focus on the family to assure a continuum of care and support; and strengthening of human resources through training and on-the-job mentoring of both existing health center providers and new cadres.

Keywords: End of Project Reports, Project Achievements

This report was made possible through support provided by the US Agency for International Development under the terms of Cooperative Agreement Number 663-C-00-07-00408-00. The opinions expressed herein are those of the author(s) and do not necessarily reflect the views of the US Agency for International Development.

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From emergency response to a
**COMPREHENSIVE
COUNTRY-OWNED
SYSTEM FOR
HIV CARE AND
TREATMENT**
2011–2014



Photo by GENAYE ESHETTU

ETHIOPIA NETWORK FOR HIV/AIDS TREATMENT, CARE, & SUPPORT PROGRAM



**ENHAT-CS
PARTNERS:**



ANECCA
African Network
for the Care of
Children Affected
by HIV/AIDS



DHEA
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EPHA
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IMPACT

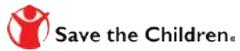


I-TECH
ETHIOPIA



NNPWE

National Network
of Positive Women
Ethiopians



Save the Children



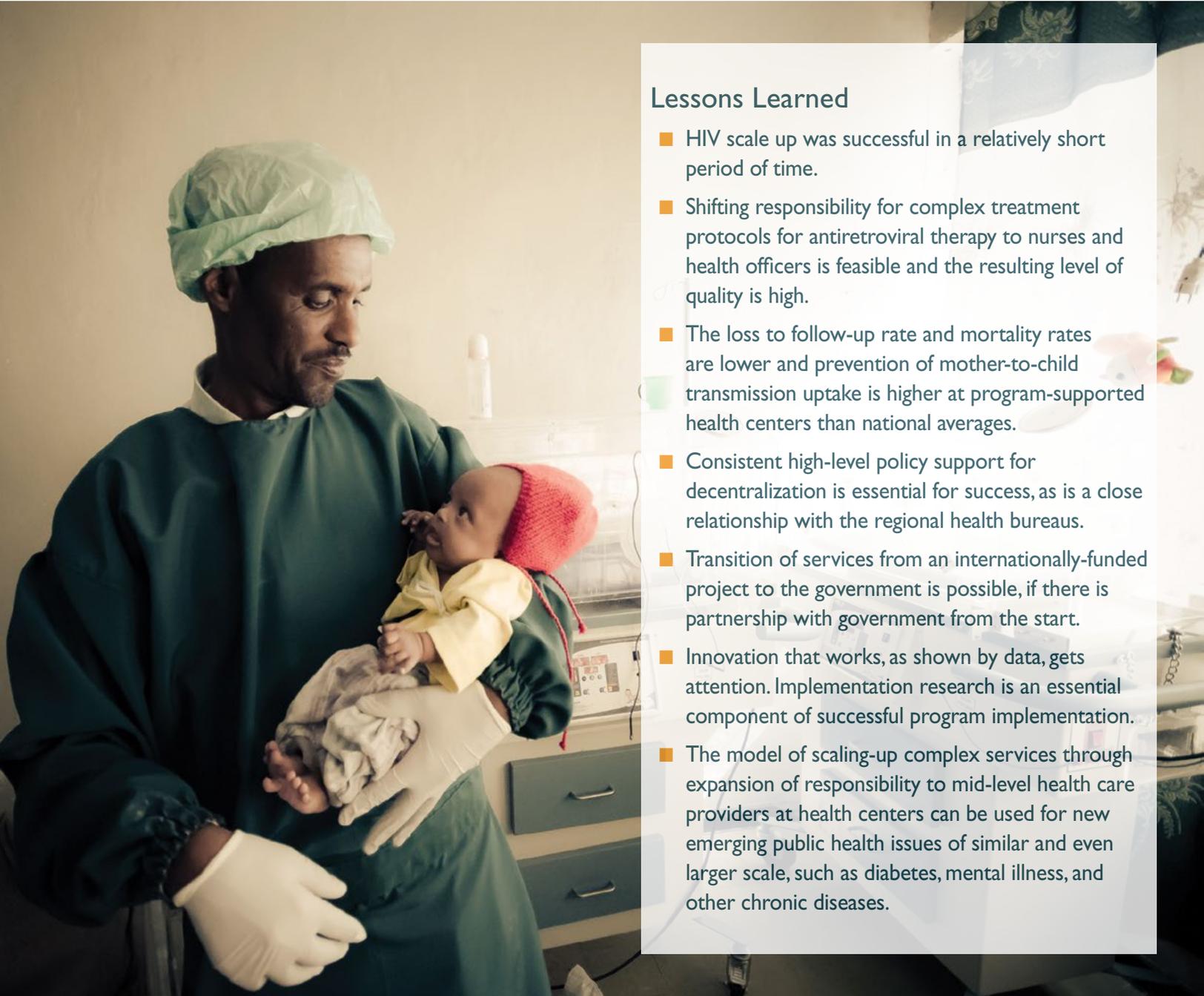
Photo by WARREN ZELMAN

From emergency response to a

COMPREHENSIVE COUNTRY-OWNED SYSTEM FOR HIV CARE AND TREATMENT

THE ETHIOPIA NETWORK FOR HIV/AIDS TREATMENT,
CARE, AND SUPPORT PROGRAM 2011–2014

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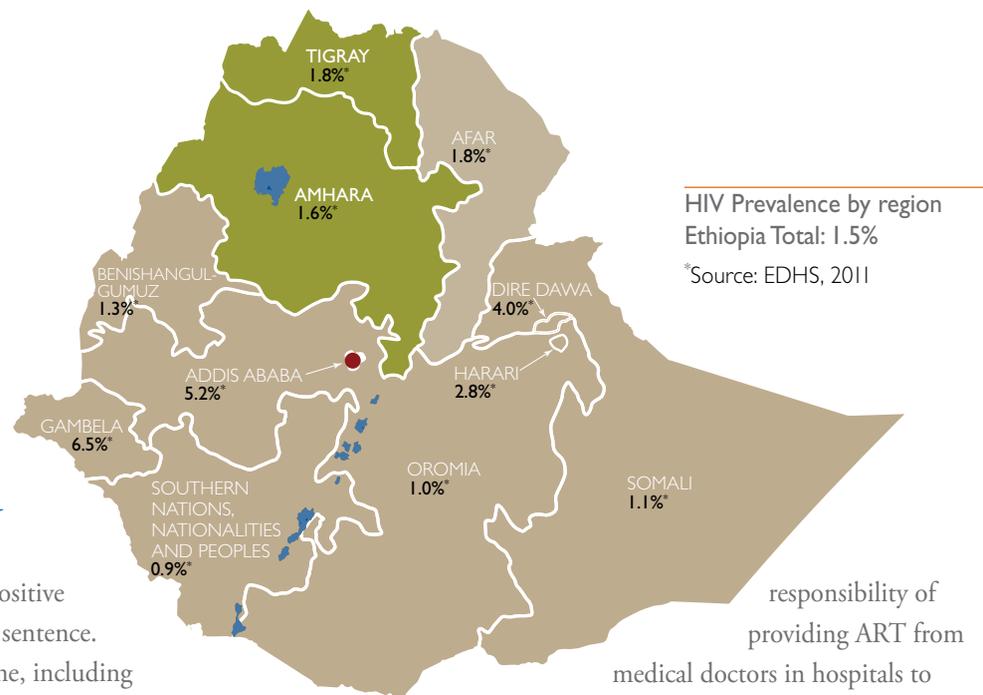
Lessons Learned

- HIV scale up was successful in a relatively short period of time.
- Shifting responsibility for complex treatment protocols for antiretroviral therapy to nurses and health officers is feasible and the resulting level of quality is high.
- The loss to follow-up rate and mortality rates are lower and prevention of mother-to-child transmission uptake is higher at program-supported health centers than national averages.
- Consistent high-level policy support for decentralization is essential for success, as is a close relationship with the regional health bureaus.
- Transition of services from an internationally-funded project to the government is possible, if there is partnership with government from the start.
- Innovation that works, as shown by data, gets attention. Implementation research is an essential component of successful program implementation.
- The model of scaling-up complex services through expansion of responsibility to mid-level health care providers at health centers can be used for new emerging public health issues of similar and even larger scale, such as diabetes, mental illness, and other chronic diseases.

INTRODUCTION

Ten years ago, in 2004, testing positive for HIV in Ethiopia was a death sentence. It was the start of a painful decline, including illness and ostracism from society, ultimately leading to premature death. Today, it is the start of care and treatment that includes not only antiretroviral therapy (ART), drugs that prolong life and restore health, but a comprehensive package of facility- and community-based care and support. This dramatic improvement in the lives of HIV-infected Ethiopians, their families, and communities is due to Ethiopia's success in making ART and other HIV services widely available and free of charge to its approximately 90 million citizens. The US Agency for International Development (USAID) Ethiopia Network for HIV/AIDS Treatment, Care and Support (ENHAT-CS) program, which ran from 2011 to 2014, was one of the Government of Ethiopia's (GOE) key partners in this work. The program leaves behind a legacy of country-owned, sustainable HIV service delivery in Amhara and Tigray.

In 2005, the GOE recognized that HIV had become a national emergency. Therefore, to expand the availability of care and treatment, the government broadened the



responsibility of providing ART from medical doctors in hospitals to nurses and health officers in health centers, decentralizing HIV care and treatment to the most local level possible. Furthermore, by engaging lay counselors and community volunteers to link patients to services, retain them, and follow up with individuals who have missed medical appointments, the government widened the continuum of care into communities.

At the time, nobody knew that this strategy of “task shifting” to non-physicians, as recommended by the World Health Organization (WHO) for resource poor countries, would work at the scale needed in Ethiopia.¹ Assisted by national and international partners, including the USAID HIV/AIDS Care and Support Program (HCSP), which was funded by the President's Emergency Plan for AIDS Relief (PEPFAR) and implemented by a Management Sciences for Health (MSH)-led consortium, Ethiopia increased the number of health centers that offered ART from zero in 2005 to more than 400 by 2010. By mid-2011, these facilities provided 86,000 people with ART.²

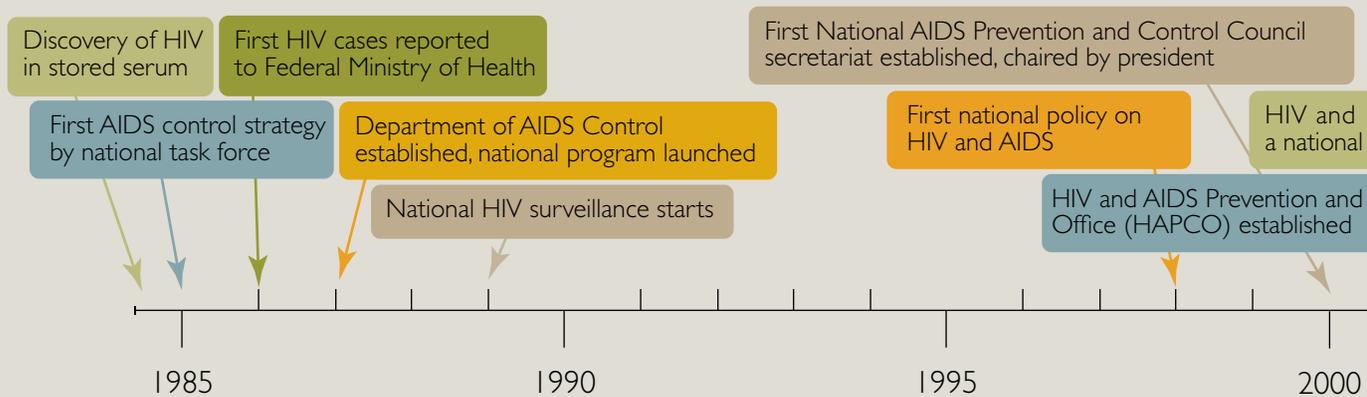


Key Achievements in ENHAT-CS-Supported Health Centers

By October 2014, ENHAT-CS had achieved the following results:

- 276 health centers offered integrated HIV services, up from 154 in 2011.
- The program successfully integrated mental health services into selected program-supported health centers.
- 84,910 PLHIV were receiving ART at supported health centers, up from 45,071 in 2011. This represents 27% of all Ethiopians on ART in 2014, and 60% of all ART patients in Amhara and Tigray.
- 97% of women visiting program-supported antenatal care (ANC) services were tested for HIV and received their results, compared to less than 70% of ANC clients nation-wide,⁴ sustaining HCSP's excellent achievement of 95% in 2011.
- 87% of HIV-infected pregnant mothers seen at program-supported health centers received ARVs, up from 45% in 2011. The national rate is estimated at 55%.⁵
- 72% of HIV-exposed infants enrolled at program-supported health centers were tested by 2 months of age, compared to 2% nationally.⁶
- The retention rate of HIV patients on ART after one year of initiating treatment was 82% in ENHAT-supported facilities, compared to 72% nationally.

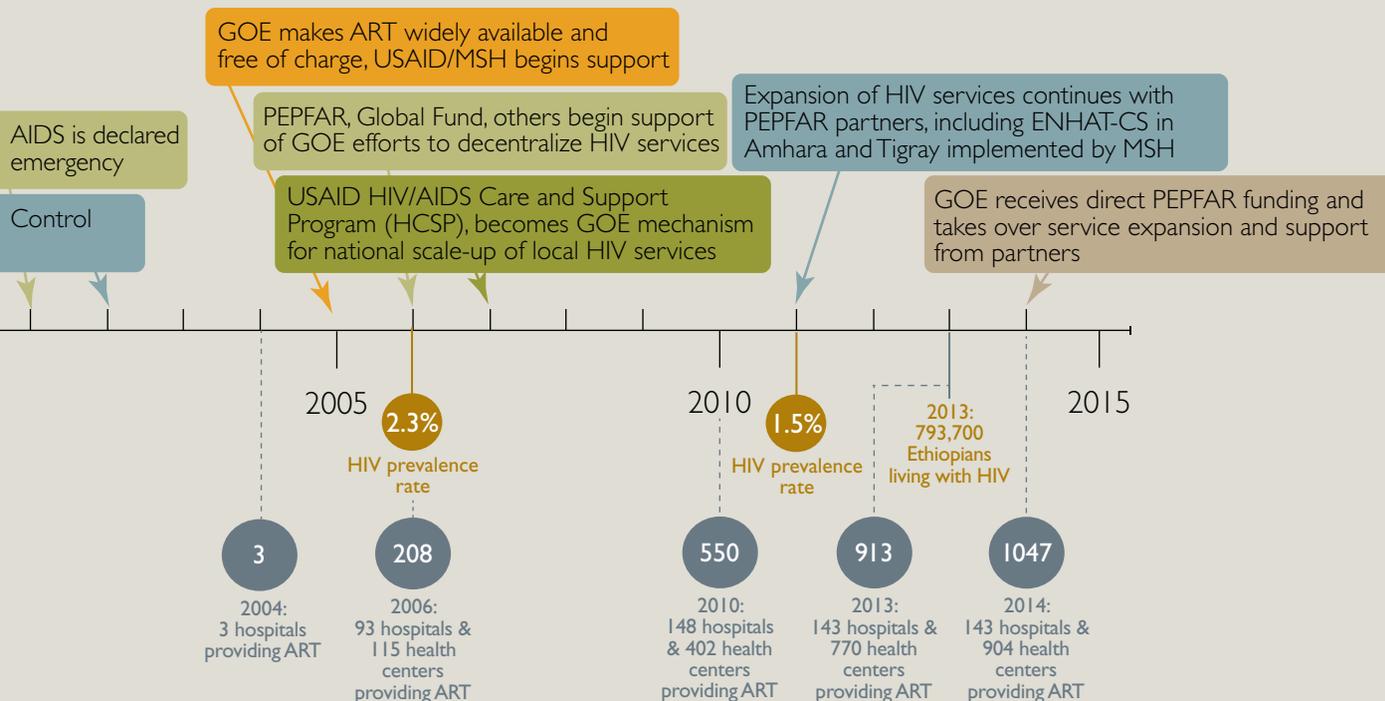
Figure 1.
A brief history of HIV in Ethiopia



At this point, HIV was no longer an emergency threatening the country's development, but the country had not fully integrated HIV services into its primary health care system. After HCSP ended, the GOE continued its national expansion of HIV services to more health centers, completing the transition from an emergency response to sustainable programming for chronic care over the next several years. ENHAT-CS, which was also funded by PEPFAR and implemented under the leadership of MSH, led this effort in Amhara and Tigray (see map, page 1).

These two regions are home to 28 percent of all Ethiopians, including more than 250,000 people living with HIV (PLHIV), which accounts for over a third of all PLHIV in Ethiopia. The program worked in partnership with the regional health bureaus (RHBs), 187 *woreda* (district) health offices, and 276 government health centers.

By mid-2014, the national endeavor, which also included expansion of HIV services to more hospitals, resulted in greater access to care; 317,443 Ethiopians are now on ART.³





The rapid start-up and the subsequent ongoing collaboration, consultation, and coordination with the GOE enabled the program to achieve its end-of-program targets.

PROGRAM STRATEGIES

ENHAT-CS integrated comprehensive, quality HIV services into other health and social services, strengthened health centers to sustain these integrated services, and used strategic information for improved evidence-based decision making. Guided by the GOE mandate of service integration, ENHAT-CS strengthened the whole health system and promoted equitable access to services. Building on approaches proven by HCSP, ENHAT-CS was characterized by: strong partnership with the GOE for task shifting, service integration, and quality assurance; a gender-sensitive focus on the family to assure a continuum of care and support; and strengthening of human resources through training and on-the-job mentoring of both existing health center providers and new cadres.

Partnership with the Government of Ethiopia

To ensure full alignment of the program with evolving GOE policies and plans, ENHAT-CS partnered with the GOE at all levels including, RHBs, zonal health departments, *woreda* health offices, and health centers. By working through the health offices, health centers, and nongovernmental organizations, the program reached the



Photo by WARREN ZELMAN

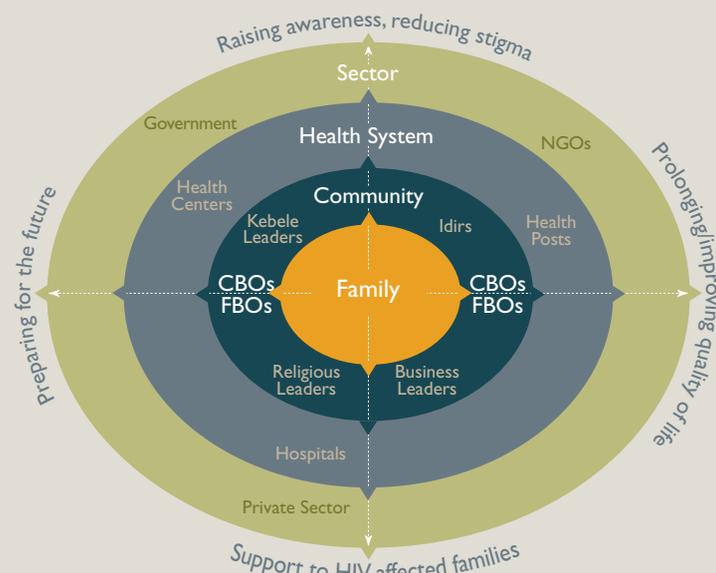
kebeles (communities). ENHAT-CS actively participated in technical working groups and conferences that guided the Federal Ministry of Health (FMOH) and the Federal HIV/AIDS Prevention and Control Offices' (FHAPCO) development of national policies and best practices.

At the health centers that already offered ART, ENHAT-CS immediately resumed mentorship activities provided under HCSP and deployed trained data clerks and case managers. At the other health centers, the program began with ART readiness assessments that identified the facilities' needs. The swiftness with which ENHAT-CS resumed operations resulted in full support and effective partnership with the RHBs in Amhara and Tigray. The rapid start-up and the subsequent ongoing collaboration, consultation, and coordination with the GOE enabled the program to achieve its end-of-program targets and effectively transition services to the GOE.



Photo by WARREN ZELMAN

Figure 2.
A family-focused approach



CBO=community-based organization
FBO=faith-based organization
NGO=nongovernmental organization

Gender-Sensitive, Family-Focused Approach

ENHAT-CS addressed health in a holistic manner by identifying and helping individuals infected and affected by HIV and their families through a wide variety of community-based vehicles, primarily involving health extension workers, associations of women and PLHIV, faith-based organizations, and *woreda* and *kebele* officials. Together, these partners now act as a safety net that enables poor and vulnerable individuals to access basic palliative care, social, nutritional and economic support, prevention services, and community-based tuberculosis (TB) and HIV services, including support for adherence to treatment regimens.

The family focus meant that when someone was diagnosed with HIV, health center staff encouraged the client to bring their entire family for testing, care, and support. This approach proved especially effective in identifying HIV-infected children who had not been identified through prevention of mother-to-child transmission (PMTCT) services.

The program addressed gender inequity by improving access to antenatal care (ANC) and PMTCT programs and by involving male partners and community leaders in advocacy for gender rights and against gender-based violence.

Human Resource Development

ENHAT-CS supported the GOE's approach to human resource capacity building through in-service training for clinical health care providers and pre-service training for lay counselors and community volunteers, combined with focused on-the-job mentorship and supportive supervision. In addition to health care providers, trainees included health center managers and technical staff at the regional, zonal, and *woreda* levels, as well as community leaders and volunteers. For all training, ENHAT-CS used standard government-approved curricula when available and GOE-certified instructors, supported by program staff.

While most training targeted people in existing positions and roles, ENHAT-CS also trained and provided financial support for four new cadres of workers introduced by the GOE specifically for HIV service expansion to health centers.

- **Case managers**, who are themselves HIV infected, provide personalized care to HIV-infected patients seen at health centers, support adherence to treatment, help patients manage side effects, trace lost patients through *woreda* technical staff, health extension workers, community mobilizers, and volunteers, and refer clients to appropriate community follow-up and care.
- **Data clerks** collect, record, and report service data to follow and track patients who miss appointments, monitor health centers' progress and performance, identify health centers' and patients' needs, and support health center managers' decision making.
- **Health center mentors** strengthen and support health center providers' compliance with national norms and standards through monthly on-the-job visits and ad-hoc telephone consultations. They work one-on-one with service providers to ensure that all clients receive integrated HIV and AIDS services and help health center staff and managers identify and remedy gaps, weaknesses, and obstacles to providing equitable access and care.
- **Community volunteers** from the National Network of Positive Women Ethiopia (NNPWE), who are themselves HIV infected, identify individuals, families, and households affected by HIV and link them to community resources, home-based care, palliative services, and ART and TB treatment adherence support, and strengthen referral linkages between communities and health centers.



Photo by GENAYE ESHETU



KEY ACHIEVEMENTS

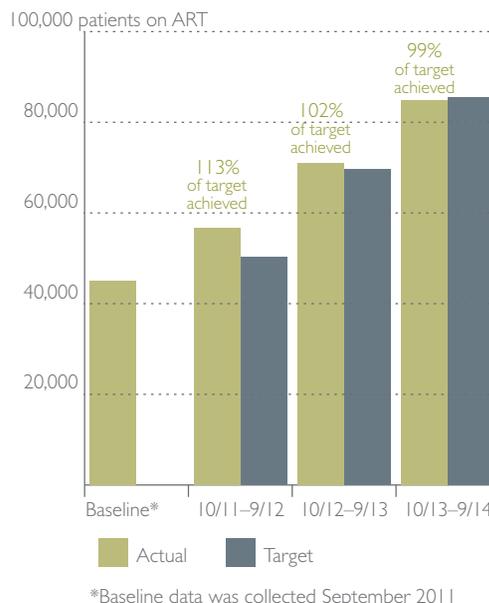
HIV Treatment

At its inception, ENHAT-CS continued support to 152 health centers that had been supported by its predecessor, HCSP, and were providing clinical services to 55,895 HIV patients. With the support of the RHBs and *woreda* health offices, by its third and final year, ENHAT-CS was working in 276 health centers, serving over 87,000 HIV patients (Figure 3). Two-thirds of these patients were women and 5.4 percent were children under the age of 15 years.

In 2013, the GOE adopted the WHO's 2010 guidelines for ART initiation, which recommended initiating patients on ART once their CD4 cell count dropped to 350, instead of the previous 200, meaning that HIV-infected individuals would start life-saving ART earlier. In 2014, the GOE further expanded its treatment approach, following the revised WHO guidelines that increased the CD4 cell count cut-off to 500. These policy changes were major steps forward because ART not only improves patients' health, it also reduces their viral load to negligible levels, reducing the likelihood of transmission to nearly zero. Within a few months of training providers to implement the 2013 guidelines, the number of patients newly enrolled on ART increased by 42 percent from 11,668 to 16,678 and the total currently on ART increased by 25 percent, from 56,694 to 71,007.

The increase in patients on ART in 2014 following the GOE's adoption of the revised WHO guidelines was not as dramatic as it had been in 2013, likely because many of the outstanding pre-ART patients were put on treatment during

Figure 3.
Increase in patients on ART in Amhara and Tigray, over time



the initial push for enrollment in 2013. However, the 2014 policy made over 90 percent of HIV patients seen at health centers in Ethiopia eligible for ART. It would be a small step for Ethiopia to move toward 'test and treat,' which provides ART for life to all patients as soon as they test positive, regardless of their CD4 cell count.

The case for test and treat is further supported by evidence that ART acts as prevention, not only in transmission of HIV, but prevention of TB infection in PLHIV. ENHAT-CS conducted a survey of 12,260 patients screened for TB at program-supported HIV clinics. The study found only 0.19 percent were TB positive, which is highly consistent with the program's routinely collected data, which have presented a rate of 0.18 percent since 2013. The low rate is consistent with recent declines in HIV/TB co-infection

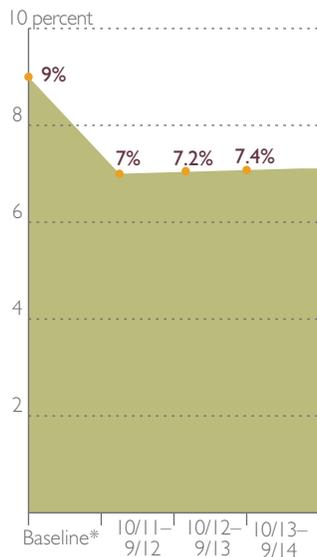
rates and increases in the proportion of HIV patients on ART.⁷ Over the life of the project, the mortality rate among patients on ART was 10.3 percent and the lost to follow-up rate (LTFU) was 7.4 percent (Figure 4). The overall patient retention rate was 81 percent, higher than the national retention rate of 72 percent.⁸

These data show the success of HIV service expansion to health centers. The LTFU rates are typically lower in health centers for a variety of reasons: 1) health centers are generally located closer to people’s homes; 2) case managers and mother mentors, HIV-positive women trained to support their peers, create links between health centers and the community; 3) health centers generally manage healthier and more stable patients.

Prevention of Mother-to-Child Transmission of HIV

With ENHAT-CS support, the FMOH began implementing an accelerated plan for scaling-up PMTCT in 2012, using a four-pronged strategy developed by WHO, UNICEF, and UNAIDS. The approach includes: 1) static and outreach HIV testing and counseling; 2) screening for and syndromic management of sexually-transmitted infections; 3) provision of family planning; and 4) provision of ART for PMTCT.

Figure 4.
Lost to follow-up rate among HIV patients at program-supported health centers, 2011–14



*Baseline data was collected September 2011.

Figure 5.
HIV infection among HIV-exposed infants by maternal prophylaxis (*n*=1,684)

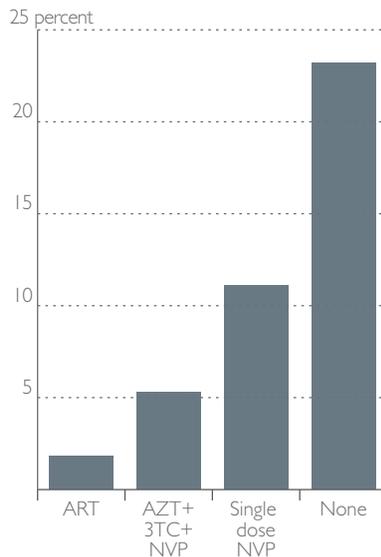
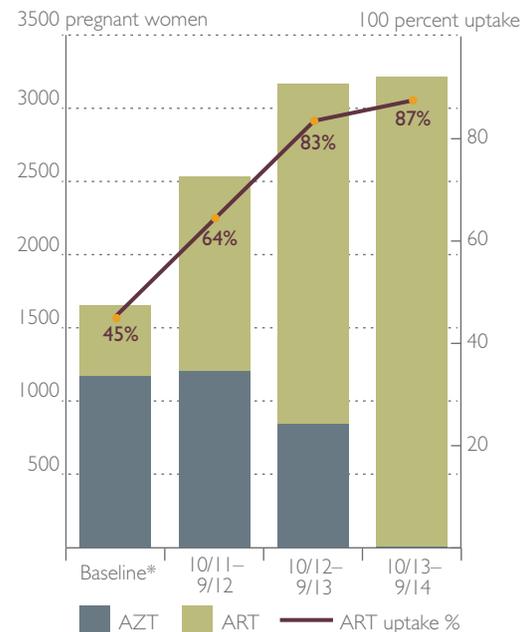


Figure 6.
ARV uptake among HIV-positive women



*Baseline data was collected September 2011.

Option B+

In 2013, based on new WHO guidelines, the FMOH adopted Option B+ as its national PMTCT strategy. While previous PMTCT options involved treatment or antiretroviral (ARV) prophylaxis for some time during pregnancy and for the duration of breastfeeding, Option B+ recommends ART for life for all HIV-infected pregnant women, irrespective of the baby's gestational age or the mothers CD4 count, and initiates therapy upon diagnosis of HIV. ENHAT-CS conducted a study in Tigray in 2012 that showed that vertical transmission was lowest among babies whose mother had been on ART (Figure 5).

The program integrated PMTCT services into ANC and labor and delivery clinics through provider training, supportive supervision, quality improvement, and monthly mentorship. By 2014, all program-supported health centers were implementing Option B+. At these health centers, 97 percent of pregnant women who attended at least one ANC appointment knew their HIV status. Among those who were HIV-infected, 87 percent were on ART, up from 45 percent in 2011 (Figure 6). The program's achievement far exceeds the current national ARV coverage for PMTCT of 40 percent and approximates the national target of 90 percent ARV coverage, which was set with the goal of eliminating mother-to-child transmission of HIV in Ethiopia by 2015.

Mother Mentors and Mother Support Groups

Mother mentors, HIV-infected women who have gone through PMTCT services and have been trained to support other HIV-infected pregnant and lactating mothers, have been operational in Ethiopia since 2008. At 85 mostly high-patient-load health centers, ENHAT-CS supported mother mentors and the mother support groups (MSGs) that they lead. The program also provided mother mentors with a nominal monthly stipend of 500 Ethiopian Birr (approximately \$27).

Health providers immediately refer pregnant women who test positive for HIV to a mother mentor for counseling, support, and enrollment in an MSG. During MSG meetings, mother mentors offer HIV and health education, encourage members to bring their children and partners for HIV testing, and counsel women on adhering to their medication regimens. The MSGs provide an opportunity for peer support, link women to income-generating activities and legal and social services, and trace patients who have missed appointments at the health center.

ENHAT-CS undertook several studies to determine the effect of enrollment in MSGs on uptake of PMTCT services and the rate of vertical transmission. In 2012, Option B+ had not yet been introduced in Ethiopia, so overall mother-to-child transmission rates



Photo by GENAYE ESHETU



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THE MOTHER MENTORS OF KOREM TOWN

Knowledge is power, so the saying goes.

No one understands that more than Teberih Tsegay, Almaz Haile, Jember Alemayehu, and Yeshi Derebew, mother mentors in Korem Town, Ethiopia. “Some years back there was no one to teach us, so we gave birth to HIV-positive children. But now we can teach others so no child will be born with the virus,” said Jember.

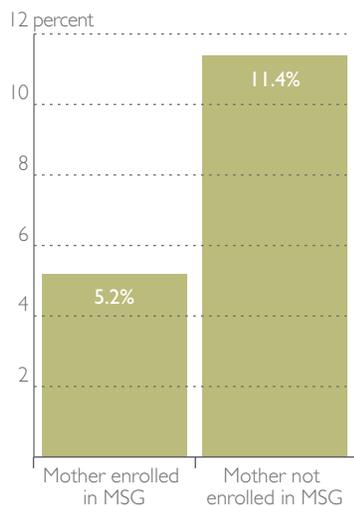
The four women began working with the Korem Health Center as mother mentors in 2010. They have worked with more than 100 HIV-infected pregnant women and many of their husbands, teaching them the steps necessary to keep their babies safe from the virus.

Remarkably, since they began their work four years ago, no child from Korem Town had been born HIV-positive at the health center by mid-2014. The four women have gone above and beyond their scope of work, not just running the clinic’s peer education sessions, but following up with mothers in their homes and working with the district health office to ensure that all HIV-infected pregnant women in their town receive proper care to prevent transmission of the virus to their babies.

In 2014, Save the Children and the Frontline Health Workers Coalition honored Teberih, Almaz, Jember, and Yeshi with a REAL Award. The REAL Awards are a global program designed to develop greater respect and appreciation for health workers and the lifesaving care they provide around the world.

were higher than current data show. However, ENHAT-CS's studies showed that participation in an MSG was associated with significantly better health outcomes among both mothers and babies. Seventy percent of women who belonged to MSGs had delivered their babies at a health facility; the national average for facility delivery is 10 percent.⁹ Less than three percent of babies born to mothers enrolled in MSGs tested positive for HIV at six weeks of age, compared to 13 percent of HIV-exposed infants nationally (Figure 7). A study conducted in Tigray showed that the mother-to-child transmission rate among MSG members was half that of unenrolled HIV-infected mothers. It also found that mothers enrolled in MSGs are more likely to test their infants for HIV: 88 percent of babies born to MSG members were tested, compared to 45 percent of babies born to mothers not enrolled in an MSG. Therefore, though Option B+ has further decreased the rate of mother-to-child transmission of HIV in Ethiopia, MSGs are still relevant for encouraging healthy behaviors in pregnancy and early childhood.

Figure 7.
Percentage of HEIs who are HIV-positive by mother's enrollment in an MSG



Mother mentors effectively reduce facility-based providers' workload by providing HIV counselling and education, general health education, adherence counselling, and tracking of patients LTFU. In light of this, ENHAT-CS, the USAID Community Prevention of Mother-to-Child Transmission (CPMTCT) project, and USAID successfully advocated with the GOE to sustain mother mentors with PEPFAR support through the US Centers for Disease Control (CDC) after ENHAT-CS ends.

HIV-Exposed Infants and Early Infant Diagnosis

According to national guidelines, all HIV-exposed infants (HEIs) must be enrolled in follow-up care to complete PMTCT treatment and be tested for HIV at 2, 12, and 18 months. Though this standard was integrated into Ethiopian health centers in 2009, most facilities in Amhara and Tigray did not offer HEI services until they were introduced through HCSP or ENHAT-CS. By the end of the program, these 276 health centers had a combined total of 6,406 HEIs on active follow-up, an average of 23 per health center.

The program's focused mentorship and training, combined with the GOE's prioritization of quality PMTCT, resulted in a decline in the percentage HIV-infected infants who had been tested within the first two months, but not for those tested between 2 and 12 months of age. When ENHAT-CS began, 6.9 percent of infants born to HIV-infected mothers tested positive within two months and 15.7 percent tested between 3 and 12 months were infected. By the end of the program, the HIV-positivity rates were, respectively, 1.7 percent and 8.7 percent (Figure 8). In 2013 and 2014, ENHAT-CS conducted a study that showed the positivity rate among HIV-exposed infants born in health facilities was even lower, with an overall rate of 1.4 percent testing positive at 12 months of age. Of note, the national vertical transmission rate in 2013 was 25 percent and for babies tested within the first two months, it was 21 percent.¹⁰

The program outcomes have given hope to many HIV-infected women and couples at health centers in Amhara and Tigray.

Pediatric Treatment and Care

Improved coverage and effectiveness of PMTCT programs has reduced new HIV infections among children under 15 years old by 35 percent globally between 2009 and 2012. Despite this, in 2012 there were about 3.3 million children under 15 years of age living with HIV, representing about 10 percent of PLHIV. The vast majority of these people live in sub-Saharan Africa.

In Ethiopia, an estimated 200,300 children are living with HIV.¹¹ Yet, scaling up pediatric HIV treatment and care to health centers has lagged behind the decentralization of

adult HIV services. At the start of ENHAT-CS, the vast majority of HIV-infected children receiving care in Amhara and Tigray were being treated at hospitals. Program-supported health centers saw just over 2,000 HIV-infected pediatric patients. The program's intense focus on building the capacity of health centers to care for HIV-infected children, an emphasis on PMTCT, and efforts to trace HIV-infected children previously missed by the system, resulted in more than doubling that number by 2014. Children now account for 5.4 percent of all patients on ART at these health centers, up from 4.7 percent in 2011 (Figure 9). Encouragingly, 89 percent of HIV-infected children seen at program-supported health centers were still on treatment 12 months after initiating ART, compared to 83 percent of all HIV patients, suggesting that once they are in the system, children do well adhering to treatment.

Figure 8. DBS testing between 0-2 months and 3-12 months with HIV positivity rates, 2011-2014



Figure 9. Currently-enrolled pediatric patients among all ART patients





Photo by GENAYE ESHETU

Human Resources

To ensure the highest quality of care possible, ENHAT-CS trained health professionals and volunteers at all levels of the health system. See the box to the right for topics covered.

- 3,728 nurses, health officers and lab technicians received in-service training for improved HIV service delivery.
- More than 2,000 community health and para-social workers received training, including 322 case managers, 381 data clerks, 340 mother mentors, 350 community outreach volunteers, and 633 religious leaders.
- 619 health workers received training and on-site support for mentorship of HIV service delivery at 217 health centers of 188 *woredas* in 17 zones.
- 304 health information technicians and information technicians received training on PEPFAR reporting.
- 549 *woreda* health officers received technical training and 329 received management and leadership training for improved management and coordination of their *woreda* health networks.

Training Area	Number of Health Workers Trained
■ Adult HIV care and treatment	876
■ Pediatric HIV care and treatment	876
■ ANC/PMTCT	857
■ TB/HIV co-infection management	184
■ Provider-initiated testing and counseling	246
■ Mental health	96
■ Laboratory related activities	593
■ Infection prevention/patient safety	542
■ Government mentorship	619
■ Case management	322
■ PEPFAR reporting (data clerks)	381
■ PEPFAR reporting (government health information technicians)	304
■ Strengthening the technical management of the <i>woreda</i> health network	549
■ Leadership management development (<i>woreda</i> health officers)	329
■ Mother mentorship/support group leadership (mother mentors)	340
■ Community outreach (volunteers)	350
■ Community outreach (religious leaders)	633

Following the training of health care providers in service delivery areas, ENHAT-CS staff used structured checklists and job aids to guide on-the-job mentorship and support visits, documenting key findings in a logbook at each health center. The logbook also contained a plan of action for improving services, which was reviewed by ENHAT-CS staff and the head of the health center at each visit (see box to the right).

ENHAT-CS leaves behind a large number of capable health providers and managers, as well as an effective system for their support. After the program ends, the GOE will assume direct responsibility for continued training, mentoring, and financing of the health workforce so that program achievements will be maintained and can be replicated elsewhere.

CONTINUUM OF CARE SAVES LIVES



Photo by GENAYE ESHETU

Seid Eshetu was shocked to learn that he was infected with HIV when he visited Haik Health Center because of regular coughing and general weakness. However, the 38 year-old father of two was comforted when he received posttest counseling and was escorted to the health center's ART clinic, where he was enrolled in care.

The case manager, Ahmed Eshetu, advised Seid to bring his wife and two children to the facility for HIV testing and counseling. Seid was concerned when he learned that his wife is also infected, but greatly relieved to find that his children tested negative for the virus.

Several months later when Ahmed was reviewing files, he discovered that Seid had missed appointments. Ahmed worked with the health center's community mobilizer, community-based health extension workers, and a community outreach volunteer to trace Seid. They found him at his home suffering from a lower respiratory tract infection, unable to work to support his family.

"I was healthy," Seid told the community volunteer, "But I stopped ART and became ill and unable to work."

The community mobilizer convinced Seid to return to the health center, where the Ahmed counseled him on adherence and convinced him to restart treatment. As a result, Seid regained good health and was able to return to work. Now Seid is vocal in his praise of the community mobilizers and case managers and tells others about the importance of adhering to ART regimens.

As part of a late 2013 audit of ENHAT-CS, the USAID Office of the Inspector General commented on the logbook, writing, "...the project implemented innovative tools that made its activities more effective. For example, ENHAT-CS kept a register at each health center it supported to document each visit, including items for follow-up—a valuable tool to improve the usefulness of site visits." This same audit validated the quality of ENHAT-CS's tools—it found a less than two percent variation between recorded and reported data (the standard for data accuracy is a variability of less than five to ten percent).



Gender

In Ethiopia, gender dynamics and health care provider attitudes create barriers to women's access to ANC and PMTCT services and their ability to effectively cope with HIV. The shifting of HIV services from hospitals to health centers improved access to care for many women, as their family responsibilities and limited disposable income often compromised their ability to travel to a hospital for care. However, not all of the barriers women faced in accessing care were eliminated through decentralization of services. ENHAT-CS addressed the root social and cultural causes of gender inequality through its interventions.

To do this, ENHAT-CS assessed the gender-related perceptions of program staff, health center providers, mother mentors, health center clients, and religious leaders. The program found that health center clients' and providers' perceptions of gender-related issues were directly opposed. ENHAT-CS used this information to develop a checklist-based guide that helps health center staff implement simple solutions to meet women's needs, such as spending more time with female clients. By October 2013, all program-supported health centers had used the guide, regularly discuss gender issues, and had developed and implemented action plans to improve women's care. Some of the solutions include screening all women for domestic violence and asking all women about their family and issues beyond the immediate reason for their visit. Staff are also trying not to judge or scold young unmarried girls who are pregnant or have a sexually-transmitted infection. Some health centers are addressing dynamics between the male and female staff.



Photo by WARREN ZELMAN

By October 2013, all program-supported health centers, held regular discussions on gender issues and had developed and implemented action plans to improve women's care.

Photo by GENAYE ESHETU





FROM EMERGENCY RESPONSE TO SUSTAINABLE HIV PROGRAMMING AND MANAGEMENT

In just under a decade, the partnership between the GOE, PEPFAR, USAID, CDC and others resulted in a dramatic and unprecedented increase in provision of HIV services throughout Ethiopia, saving and dramatically improving the lives of thousands of HIV-infected Ethiopians and preventing many new infections.

As recently as 2008, more than one fifth of HIV patients seen at health centers in Amhara were bedridden; by 2014, this proportion had dropped to far less than one percent (Figure 10). The overall prevalence of HIV in Ethiopia declined from 2.4 percent in 2008 to 1.5 percent in 2011.¹² By the end of 2014, the prevalence among newly-tested clients seen at program-supported health centers was 0.9 percent, down from 1.9 percent in 2011.

The contributions of ENHAT-CS, its predecessor HCSP, and other programs not only resulted in improved health outcomes, they developed local capacity and know-how to manage the HIV epidemic. HIV infection is no longer a national emergency; it is a manageable chronic disease. The GOE's challenge now is to sustain and build on the gains of the past decade.

Recognizing this evolution, in 2012 the US Government began gradually shifting PEPFAR funds and direct responsibility for HIV clinic-based services to Ethiopian institutions. The role of US Government-funded implementing partners therefore became one primarily of technical assistance, capacity building, and systems

strengthening.¹³ In Ethiopia, this changing role started in 2013 with transitioning critical program functions, approaches, tools, and tasks conducted by the clinical mentors, case managers, data clerks, and mother mentors employed by ENHAT-CS to government health offices and PLHIV associations. While the program had always worked in close partnership with the GOE, the full transition of support for health care workers required the intense efforts described in the following pages.

Figure 10.
Percent of HIV-positive patients served at program-supported health centers who are bedridden, Amhara, 2008–2014



Integration

To facilitate the transition from an emergency to a development response, using the PEPFAR platform, ENHAT-CS integrated HIV care into primary health care services, thus strengthening health centers' capacity to provide reproductive health, maternal, newborn, and child health, and infectious diseases services. As a result, many health services beyond those associated with HIV became more readily available to HIV patients. These included family planning services, malaria diagnostics, management of sexually-transmitted infections, and services for neglected tropical diseases such as onchocerciasis, schistosomiasis, and leishmaniasis. The program also developed a focused mental health program within health centers—a first in the two supported regions—that enabled providers to effectively identify, diagnose, and either treat patients on site or refer them for further care.

Clinical Mentorship

While directly conducting health center mentorship, ENHAT-CS also developed a government clinical mentorship approach through which it trained and supported *woreda* and select health center ART providers to become clinical mentors. These government clinical mentors included nurses and health officers who mentored their colleagues in the HIV clinic as well as the ANC, labor and delivery, and TB clinics within their own facility and in three or four satellite health centers. ENHAT-CS built *woreda* health office managers' capacity to support and manage the mentors. Following training, the program's staff mentored these new mentors for six months using a structured checklist tailored to each type of clinic.

The joint mentorship visits prepared the government mentors to provide comprehensive support to clinicians and strengthened their service delivery skills. After the joint mentorship period, ENHAT-CS assessed the government clinical mentors, graduated those who were ready, and provided additional mentoring for those who needed it. Upon graduation, the government mentors were ready to mentor clinicians in HIV, ANC, PMTCT, and labor and delivery clinics within their own health centers and those in three to four satellite *woreda* health centers, using a structured checklist. By the end of ENHAT-CS, all zones in Amhara and Tigray were ready to conduct regular government mentorship independently of program support. The FMOH has adopted this model of *woreda*-based government mentorship as a key part of its national mentorship strategy.





The Leadership Development Program in West Gojam zone led to significant improvements in their priority areas:

Goal

Result

- | | |
|---|-------------------------------|
| ■ Increased number of deliveries conducted by trained health care providers/number of deliveries conducted in health centers | ■ 75% increase |
| ■ Increased number of pregnant women attending 4 or more ANC visits | ■ 107% increase |
| ■ Increased number of fully-vaccinated children | ■ 22% increase |
| ■ Increased household latrine utilization coverage | ■ 250% increase |
| ■ Increased number of households implementing the full health package of practices promoted by the Urban Health Extension Program | ■ 24% increase |
| ■ Improved community sanitation/increased declared open-defecation-free areas | ■ 1,260% increase (10 to 126) |
| ■ Improved adherence to activity report submission dates | ■ 50% increase |

Training

Health Care Provider Training

From its start, ENHAT-CS worked closely with the FMOH in all training activities and used government training curricula, leading to a seamless transition of training responsibilities from ENHAT-CS to the RHBs. Since the beginning of ENHAT-CS, the program supported training within an active partnership with the RHBs, who assumed key responsibilities for the HIV-related trainings, including the identification and invitation of providers and staff who need training, logistical arrangements such as identifying training venues, and co-hosting the trainings.

Leadership and Management Development

In collaboration with the MSH-implemented USAID Ethiopia Leadership, Management and Governance (LMG) project, ENHAT-CS used MSH's innovative Leadership Development Program (LDP) to improve the capacity of staff of *woreda* health offices' capacity to work as a team to lead and manage their health networks. The LDP is a participatory process that supports health managers to work together to assess their current situation, identify key challenges, and create and implement focused action plans that rapidly address those challenges with quantitative indicators to measure and document success. To create sustainability, ENHAT-CS trained facilitators from the zonal health departments to support 42 *woreda* health offices to implement the LDP. See box at left for an example of the types of results *woreda* health offices achieved as a result of the LDP.

Use of Data for Decision-Making

PEPFAR Reporting

Once PEPFAR funds the RHBs directly, the RHBs will report to PEPFAR using the funder's Monitoring, Evaluation, and Reporting (MERS) indicators. This should be a smooth transition, as nearly all of the data sources necessary for this reporting are harmonized in the national health management information system. By the end of ENHAT-CS, 88 percent of program-supported health centers employed a government data technician. Both Amhara and Tigray intend to transition the facility-level reporting responsibility to their health center-based data technicians, but will temporarily retain many of the data clerks previously funded by ENHAT-CS for a smooth transition.

To support this transition, ENHAT-CS introduced the data technicians to the PEPFAR reporting indicators and promoted a team approach to data reporting among the health care providers and data technicians. The program also trained 580 health center-based data technicians and health management information system staff from the *woreda* health offices, zones, and RHBs to capture PEPFAR-required data, summarize it, and report on the MERS indicators.

ENHAT-CS introduced the data technicians to PEPFAR reporting indicators and promoted a team approach to data reporting among the health care providers and data technicians.

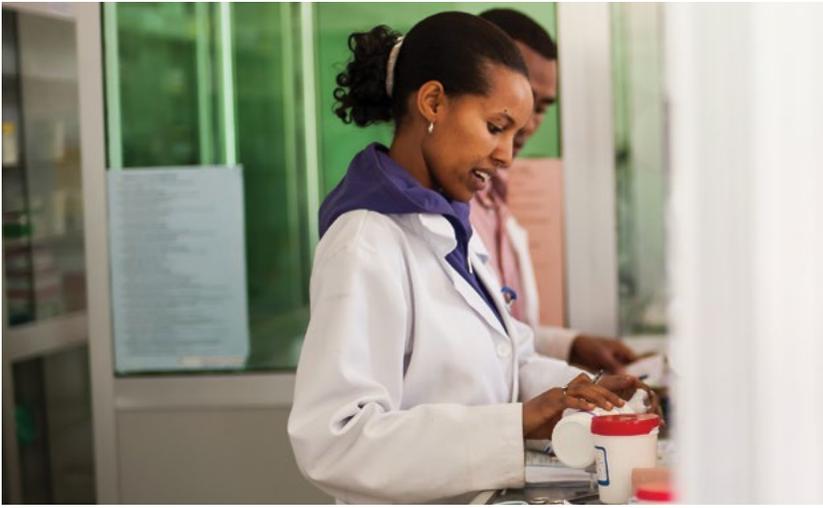
The regional health bureaus now have sustainable partnerships with the regional universities, which will continue to provide rich information to inform the regions' health care interventions.

Operations Research and Use of Data for Decision-Making

ENHAT-CS facilitated a partnership between the RHBs and the schools of public health at the University of Mekele in Tigray, and the University of Gondar and University of Bahir Dar in Amhara. Over the course of the program, the RHBs and universities conducted 25 operations research studies to answer key questions about the regions' health services and inform evidence-based decision making. Previously, the RHBs prioritized large-scale population surveys, which were expensive and time consuming to undertake. With ENHAT-CS support, the RHBs established regional technical groups to identify priority areas for research, issued requests for proposals to RHB and university staff and students, and selected proposals for funding. The RHBs disseminated the results of these studies at regional meetings, through national and international publications, and through the RHBs' websites. The RHBs now have sustainable partnerships with the regional universities, which will continue to provide rich information to inform the regions' health care interventions.

Case Management

The case managers trained and employed by ENHAT-CS were key in establishing and maintaining the continuum of care between the health center and their served communities. To ensure that the case managers' work continues, ENHAT-CS established partnerships with two regional associations of the national umbrella organization for PLHIV associations (known as NEP+). These included the Network of Charitable Societies of HIV Positives in Amhara (NAP+) and the Network of Charitable Societies of HIV Positives in Tigray (TNEP+), who will employ the case managers after ENHAT-CS's funding has ended. NEP+ had earlier begun supporting case managers through their regional associations in other regions and will facilitate the transition from ENHAT-CS to NAP+ and TNEP+.



The rapid scale-up of integrated HIV and AIDS services to health centers in Ethiopia has been a great public health success, built on the GOE's vision, leadership, and commitment to action that received strong technical and financial backing from PEPFAR, USAID, and other donors.

LOOKING FORWARD

Ethiopia has made impressive strides in curtailing the HIV epidemic within its borders and establishing strong, sustainable health systems to meet the needs of its citizens. The rapid scale-up of integrated HIV and AIDS services to health centers in Ethiopia has been a great public health success, built on the GOE's vision, leadership, and commitment to action that received strong technical and financial backing from PEPFAR and USAID, along with other donors. It is the success of Ethiopia's midlevel health providers and their dedication and commitment to saving the lives of their fellow citizens that led to the dramatic increase in the number of patients receiving life-saving care seen over the life of this program.

Over the next five years, as the GOE assumes full responsibility for its HIV programming, the US Government and other partners remain committed to continuing their support to further strengthen the Ethiopian health system and the management, leadership, and governance capacity of the public and private health sectors. Given Ethiopia's committed leadership and people, such continued partnerships will enable the country to achieve its vision of an HIV-free generation.



ENDNOTES

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Photo by WARREN ZELMAN

ACRONYMS

ANC	Antenatal care
ART	Antiretroviral therapy
CDC	US Centers for Disease Control
ENHAT-CS	Ethiopia Network for HIV/AIDS Treatment, Care and Support
FHAPCO	Federal HIV/AIDS Prevention and Control Office
FMOH	Federal Ministry of Health
GOE	Government of Ethiopia
HEI	HIV-exposed infant
HCSP	USAID HIV/AIDS Care and Support Program
LDP	Leadership Development Program
LMG	Leadership, Management and Governance project
LTFU	Lost to follow-up
MERS	Monitoring, Evaluation, and Reporting
MSG	Mother support group
MSH	Management Sciences for Health
NAP+	Network of Charitable Societies of HIV Positives in Amhara
NNPWE	National Network of Positive Women Ethiopia
PEPFAR	President's Emergency Plan for AIDS Relief
PLHIV	People living with HIV
PMTCT	Prevention of mother-to-child transmission of HIV
RHB	Regional health bureau
TB	Tuberculosis
TNEP+	Network of Charitable Societies of HIV Positives in Tigray
USAID	US Agency for International Development
WHO	World Health Organization



Photo by WARREN ZELMAN

ACKNOWLEDGEMENTS

This publication was made possible by the generous support of the United States Agency for International Development (USAID) under contract number 663-C-00-07-00408-00. The contents are the responsibility of the authors and do not necessarily reflect the views of USAID or the United States Government.

MSH gratefully acknowledges the important contributions provided by its international and Ethiopian consortium partners to the program's success. These include the African Network for Care of Children Affected by HIV and AIDS (ANECCA), Dawn of Hope Ethiopia (DHEA), the Ethiopian Interfaith Forum for Development Dialogue and Action (EIFDDA), Ethiopian Public Health Association (EPHA), HST Consulting, Association for Social Services & Development (IMPACT), International Training & Education Center for Health (I-TECH), National Network of Positive Women Ethiopians (NNPWE), and Save the Children International (SCI).

MSH also wishes to acknowledge Genaye Eshetu and Warren Zelman for the photographs contained in this report. People depicted in these photos do not necessarily have HIV or other diseases referenced in the text.



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