ETHIOPIA

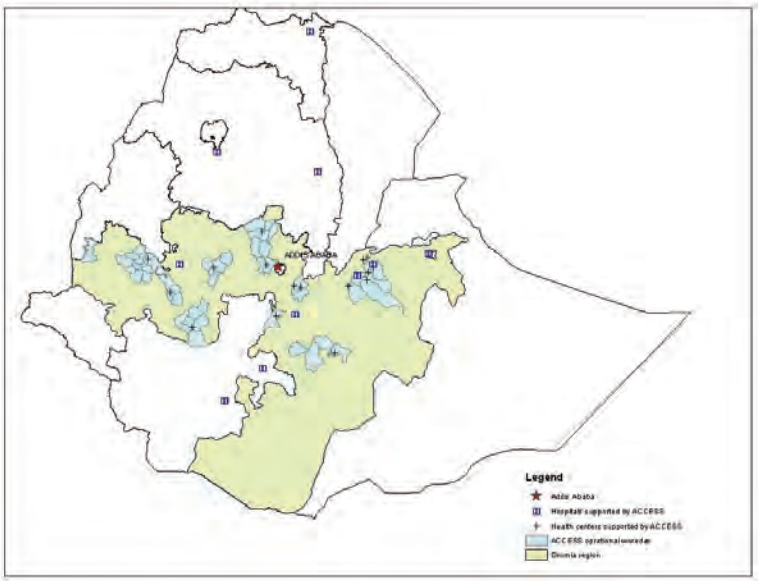
Improved Capacity of Training Institutions for Health Workers

INTRODUCTION

KEY INDICATORS

- **Maternal mortality rate (per 100,000):** 720
- **Neonatal mortality rate (per 1,000):** 39
- **Infant mortality rate (per 1,000):** 77
- **Skilled attendance at birth:** 5.7%
- **Current use of contraception (modern methods):** 9.7%
- **Total fertility rate:** 5.4
- **Antenatal care attendance with trained provider:** 27.6%

Source: Ethiopia DHS 2005



ACCESS-supported facilities and operational *woredas*

Mother and baby, Ethiopia

Ethiopia has one of the highest maternal mortality ratios in the world, with nearly 720 maternal deaths per 100,000 live births.[40] Moreover, an overwhelming majority of births (94%) occur at home, and there are large disparities among the regions in access to antenatal care (ANC)—88% of mothers in Addis Ababa received ANC from a health professional compared with less than 10% of mothers in the Somali Region.

Requested by USAID Ethiopia to address this dire situation for mothers and their newborns, ACCESS worked to improve the quality of essential maternal and newborn care (EMNC) services by building the capacity of training institutions for health workers. In partnership with the Federal Ministry of Health (FMOH) and local institutions such as the Ethiopian Nurses and Midwives Association (ENMA) and the Ethiopian Society of Obstetricians and Gynecologists (ESOG), ACCESS trained health officers (HOs) and health extension workers (HEWs) in EMNC, including infection prevention practices in service delivery and linkages with HIV prevention, care and support services at the community level. By program end, their capacity to develop learning materials and conduct competency-based training and supportive supervision was greatly improved.

[40] DHS, 2005

PROGRAM STRATEGIES, INTERVENTIONS AND RESULTS

Accelerated Health Officer Program

Pre-service education of health officers strengthened with a focus on clinical skills in maternal and newborn care to improve maternal and newborn survival

MAJOR RESULTS

- Eight hospitals strengthened as clinical training sites for HOs
- 500 HOs trained in improved clinical training sites
- 47 trainers developed to train HEWs in maternal and newborn care
- 335 HEWs trained in maternal and newborn care
- 3,208 women attended at birth by trained HEWs
- HIV tests provided to 625 women in the community by HEWs
- KMC services expanded from one to five hospitals across the country

The government of Ethiopia set new targets for training HOs under a program called the Accelerated Health Officer Training Program (AHOTP), with a goal of 5,000 HOs trained by 2010 using the approved, three-year degree program currently offered in five national universities. With intakes of 1,000 nurses per year,[41] the existing clinical facilities could not accommodate all interested students. As a result, 21 hospitals were designated as affiliated hospitals to support the AHOTP. The Carter Center provided financial and material support to these hospitals, and invited selected staff to participate in workshops on clinical training skills and learning methodology. Building on these efforts, ACCESS worked in eight of the hospitals to create enabling environments for the HO trainees to acquire knowledge and skills in the clinical care of mothers and newborns.

Based on gaps identified during an initial site assessment, action plans were developed and clinical sites were strengthened to ensure adequate resources to support teaching and learning activities. A three-week basic EmONC[42] (BEmONC) training course was conducted in three sites for 52 participants from the eight selected hospitals. Among the participants, 18 were selected to attend a six-day clinical training skills course to enhance their capacity to transfer knowledge and skills. In total, more than 500 HOs have benefited from the improved clinical learning environments.

Focused antenatal care (FANC) is now the standard of care in seven of the eight hospitals, and all eight have markedly improved their infection prevention practices and women-friendly care. Active management of the third stage of labor (AMTSL) and essential newborn care are routinely carried out in all eight hospitals. Care and follow-up in the immediate postpartum has also improved, and many women remain in the facilities for at least six hours before discharge.

To address remaining gaps in performance, ACCESS selected four of the hospitals and oriented them to the Standards-Based Management and Recognition (SBM-R) approach, which uses agreed-upon performance standards as the basis for measuring performance and identifying gaps in quality of care, as well as rewarding compliance with standards through recognition mechanisms. A number of challenges remain, including inconsistency in practices and non-availability of magnesium sulphate for treatment of pre-eclampsia and eclampsia. As the program ends, ACCESS will support ongoing efforts by the eight hospitals to improve the

[41] HO training is often seen as a career path for nursing and midwifery for those who only have the qualifications to enter the diploma (rather than the degree) program.

[42] **Basic EmONC** services should include the following: parenteral antibiotics, parenteral uterotonics, parenteral anticonvulsants, manual removal of placenta, manual removal of retained products (preferably by manual vacuum aspiration), assisted delivery by vacuum and newborn resuscitation. **Comprehensive EmONC** services at the district hospital level should include: all the above plus surgical capability (caesarean section), anaesthesia and blood transfusion.

quality of care and to focus on standardizing the use of partographs in labor and the administration of magnesium sulphate for eclampsia.[43]

Health Extension Worker Program

Designed and implemented an in-service training program to update HEWs in evidence-based maternal and newborn care

The Ethiopian Ministry of Health (MOH) developed a Health Sector Development Plan (HSDP-III), which includes the goal of accelerating the expansion of primary health coverage and increasing the number of health care workers. At the core of the HSDP-III is the Health Extension Program (HEP), introduced in 2004–2005, which trained and deployed nearly 30,000 female HEWs, two per *kebele* (village) or approximately two per 5,000 people. These tenth-grade graduates undergo an additional year of training and perform a variety of community-based services in rural areas, operating from a health post.[44] As the government's main vehicle for bringing key maternal, neonatal and child health interventions to the community, HEWs conduct household visits and work with community volunteers and *kebele* administration to carry out 16 different health interventions.

ACCESS was tasked to build the capacity of the HEWs to provide EMNC using the following approaches:

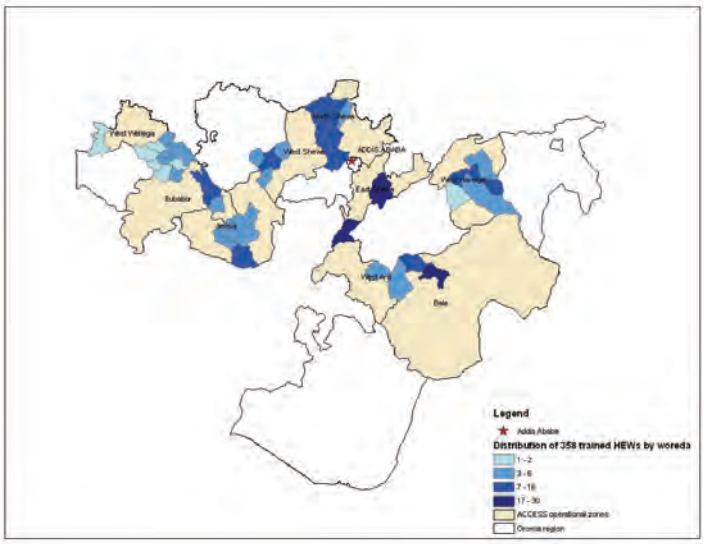
Training of HEWs

ACCESS worked through the ENMA to train HEWs in EMNC at the community level. Twelve health centers in the Oromia Region were selected as target training sites, and materials and supplies were procured and distributed to each to fill identified gaps and create an enabling environment for trainees.

Working closely with the FMOH's Family Health Division, UNICEF, Save the Children USA, the ENMA and others, ACCESS formulated a learning resource package comprising a reference manual, trainer's guide, participant's manual and a monitoring logbook. The reference manual is based on the Hesperian Foundation's *A Book for Midwives*, and is targeted to the knowledge and skills that HEWs need to provide safe and clean births and newborn care.

Standardization courses were conducted for 47 trainers, including midwives, nurses and HOs, from the selected sites. The trainers were provided with updates on EMNC, oriented to the HEW learning materials for safe and clean birth, and prepared to teach effectively through participation in a modified clinical training skills course.

Trained HEWs have attended 3,208 births, given misoprostol to 2,596 women during delivery, provided immediate essential care for 3,112 newborns, and conducted 3,347 postpartum visits within of three days of birth.



[43] In 2010, UNICEF is arranging a large procurement of Mag SO4 to address this major gap in provision of EmOC.
[44] HEP document, 2006

Between March and October 2008, these 47 trainers in turn trained 358 HEWs from 265 health posts, and during each round of training, ENMA and ACCESS staff provided supportive supervision in collaboration with the regional health bureau. In total, trained HEWs in 153 of these health posts attended 3,208 births, gave misoprostol to 2,596 women during delivery to prevent postpartum hemorrhage (PPH) (a new approach in Ethiopia), provided 3,112 newborns with immediate essential care,[45] and conducted 3,347 postpartum visits within three days of birth. Moreover, these HEWs attended 11% (or 3,208) of all expected births for these 153 health posts.[46] Linkages between HEWs and referral health centers were also strengthened through ongoing monthly meetings at the district level.

Table 9 highlights the improvements in MNH services at all 12 health centers in which training was conducted.

Table 9: Performance of ACCESS-supported Health Centers and Hospitals in Terms of Deliveries with Skilled Birth Attendants (SBAs), use of AMTSL and Use of Partograph

INDICATOR	OROMIA (JANUARY–OCTOBER 2008)	WEST HARARGHE (APRIL–JULY 2009)*		TARGET	% ACHIEVED
	HEALTH CENTER (N=11)	HEALTH CENTER (N=4)	HOSPITALS (N=6)		
Number of deliveries with a SBA at USG-assisted programs	2,617	36	2,968	7,500	75%
Number of women receiving AMTSL through USG-supported programs	1,917	36	2,774	1,500	315%[47]
Number of births in ACCESS-targeted facilities that occurred with a skilled attendant using a partograph	1,108	19	504	1,740	94%

*Note: The West Hararghe program began in the spring of 2009, with data collection initiated in April 2009.

Mobilizing Communities

ACCESS assisted the HEWs in the Oromia Region to conduct community mobilization activities to increase demand for their MNH services and to extend the reach of these services in their communities. This included support in adapting and distributing information, education, communication (IEC)/behavior change communication (BCC) materials to educate families about maternal and neonatal health issues. In West Hararghe, ACCESS distributed 1,090 such materials, including flip charts, misoprostol cue cards, and birth preparedness and complication readiness cue cards. ACCESS met quarterly with the HEWs to review implementation of activities.

At project end, ACCESS is rolling out utilization of the Community Action Cycle (CAC) to volunteer community health promoters. The CAC is a community mobilization process in which the capacity of the community to address their health needs is enhanced by planning, carrying out and evaluating activities on a

[45] Immediate essential care includes drying and wrapping, clean cord care and immediate breastfeeding.

[46] Based on the DHS 2005 rural crude birth rate of 37.3% and the catchment population of a health post being 5,000 individuals.

[47] ACCESS had set this target very low, as AMTSL was not institutionalized and not being reported, a situation which continues despite a full review of national HMIS logbooks. However, AMSTL is now the norm.

participatory and sustained basis. Thus far, 96 HEWs have participated in a two-day training course on the CAC.

Extending Prevention of Mother-to-Child Transmission of HIV (PMTCT) Services through HEWs

The greatest challenges to comprehensive HIV/AIDS services in Ethiopia are low ANC coverage and institutional delivery rates, as well as poor uptake of PMTCT services in public facilities. Efforts to increase the uptake of PMTCT and HIV counseling and testing (HCT) services should be directed closer to the community to improve utilization of these services. HEWs, situated at the community level and performing ANC and delivery services, represent a viable opportunity to increase the availability and uptake of PMTCT services.

Mother and father with new daughter in Robe Health Center, Ethiopia

In response to this need, ACCESS piloted a project supporting 40 HEWs in 31 selected health posts in the Oromia Region to: 1) target women accessing ANC and labor and delivery services in the home and at the health post; and 2) deliver comprehensive PMTCT services, including HIV rapid testing and referral to health centers for antiretroviral therapy (ART). The project utilized HEWs and voluntary community health workers (VCHWs) to improve community awareness and demand for PMTCT services and to strengthen community and health center referral linkages to improve access to care and support for women and infants found to be HIV-positive. HEWs are encouraged to train the VCHWs in their communities to ensure that they talk with pregnant women about new PMTCT services and the importance of delivering with a HEW. To date, HEWs in 21 of the 31 pilot PMTCT health posts have provided PMTCT counseling to 725 women and provided HIV testing to 625 of these women, seven of whom were HIV-positive. HIV-positive women were referred to health centers and in some cases were accompanied by the HEW for their first visit.

ACCESS CORE-FUNDED INITIATIVES

Africa Regional Pre-service Midwifery Education Initiative

In partnership with the WHO Regional Office for Africa, ACCESS worked for five years to implement the Africa Regional Pre-Service Midwifery Education Initiative. To address the Initiative's goal of reducing maternal and newborn morbidity and mortality, ACCESS trained a total of 36 midwife teachers and preceptors from approximately half of the 24 midwifery schools on best practices in BEmONC and the Maternity Section at Yekatit 12 Hospital was strengthened to be a clinical training site, and this site continues to be used. ACCESS also advised on revisions to curricula for midwives to include the latest evidence-based standards of maternal and newborn health care with a focus on BEmONC. This included work with UNFPA and other stakeholders on a competency-based job description on which to base a revised curriculum, and support to the Ministry of Education to strengthen degree-level programs through review of curricula. ACCESS was also instrumental in sharing resources—such as the *Best Practices in Essential and Basic Emergency Obstetric and Newborn Care Learning Resource Package*—with all training institutions. ACCESS improved the knowledge and skills of midwifery tutors and clinical preceptors in BEmONC to enable them to effectively teach their students to care for women and newborns at all levels of the health care system. These tutors and clinical preceptors, now armed with updated BEmONC knowledge and skills as well as enhanced teaching capacity, will form a core of local experts who can conduct training activities and act as mentors for other trainers.

Increased Use of Targeted Interventions by Skilled Providers

ACCESS and the ESOG worked together to increase the use of targeted interventions—such as AMTSL, essential newborn care and newborn resuscitation—by skilled providers to enhance maternal and newborn survival. As the selected clinical training site, Ambo Hospital in the Oromia Region was strengthened through the capacity building of hospital staff and provision of essential equipment. The hospital is staffed with an obstetrician and can now provide comprehensive emergency obstetric care. In addition, the ESOG strengthened the capacity of providers from health centers attached to Ambo Hospital to allow BEmOC to be performed at peripheral levels so as to decrease the delays in care and promote faster management of obstetric and newborn complications.

Kangaroo Mother Care (KMC)

With its partners,[48] ACCESS adapted its global KMC training manual for use in Ethiopia, and provided financial and technical assistance to develop related BCC materials to support KMC training and implementation. ACCESS also strengthened the KMC component of the national integrated management of childhood illness (IMCI) training by developing a supplementary KMC module to be used in conjunction with the current IMCI training manual. The complementary manual is currently under review. Prior to ACCESS interventions, KMC services were limited to a single health facility—Black Lion Hospital. ACCESS supported the upgrade of the KMC ward in this hospital and used it as a training center, which enabled the expansion of KMC services to five additional hospitals in other regions. These five hospitals were strategically selected (one per region) to serve as learning centers for further expansion through ongoing IMCI training.

LESSONS LEARNED AND SUSTAINABILITY

- **Engaging with the community** is essential in increasing utilization of HEWs and SBAs in Ethiopia, and the ACCESS Program was able to demonstrate that there are effective ways to mobilize and engage the community, often by tapping into existing groups. These groups can be used as a mechanism to address health concerns—for example, to establish funds for pregnant women who need to travel to deliver in a health facility. To measure the impact such groups can have requires appropriate monitoring tools that sufficiently capture the personal stories of how women and their families were able to use such funding mechanisms.

Woman and baby, Ethiopia

- **Strengthening supervision systems** needs to be an integral part of any continuum-of-care intervention. In a number of ACCESS Program areas, *woreda*-level supervision systems and a general lack of understanding of the importance of supervision led to delays in achieving targets in some *kebeles*. *Woreda* health officials must be involved in all community-linked health programs from the beginning to ensure that they are a part of and engaged in the program implementation process. Additionally, incorporating supervision skills and motivational strategies for supervisors needs to be considered.
- **Scaling up HEW training in safe and clean birth** requires standardizing and strengthening health centers that serve as training sites, building capacity of trainers, strengthening linkages with referral facilities, ensuring availability of supplies and providing supportive supervision. Under the ACCESS

[48] Partners included the FMOH, UNICEF, WHO, USAID's Essential Services for Health Project, Ethiopian Pediatric Association and other stakeholders.

Program, the "ideal model" was used; however, as the FMOH approaches national scale up, many of the elements that will ensure competency of HEWs in safe and clean birth are missing.

- **Working within MOH data collection systems** is challenging when the existing tools are not able to capture critical MNH interventions and cannot effectively monitor program impact. Development of the program monitoring plan needs to be realistic to the extent that the existing data collection system can support it. Focused coaching and support with those involved in data collection from the HEW to *woreda* offices needs to be included in program planning.
- **In designing an effective training initiative,** performance gaps in service provision—which include resources, knowledge and skills—should be assessed in advance and, where possible, coaching of trainees should continue after the training program ends to ensure the effective transfer of learning and to promote sustainability of knowledge and skills gained. Regional referral hospitals must be strengthened and included in training activities, as they can serve as training and clinical practicum sites for HOs and midwives.
- **The midwifery PSE activities were implemented** at a time when the MOH were focused on the Health Extension Program. However, toward the end of the ACCESS program (and linked to the HR strategy for the next 10 years) there was greater interest in investing in midwives and their education.